Gas Dynamics Tables

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Version 1.3

This document started as a collection of the tables made in the book "Fundamentals of compressible Flow Mechanics." However, since the initial phase it has grown and now has additional tables for various values of specific heat, $k = 1.2,\ 1.3,\ 1.4$ and 1.67 etc. Furthermore, the tables are more detailed than those in the book. In fact, there are no known tables that match the depth, variety, and quality of this collection. So, as far as it is known, this collection of gas dynamics tables is the biggest in the world.

These tables supposed to be used by professionals and students who would like to have handy gas dynamics tables without going through the pages of the whole books. These tables are intended to replace commercial tables.

These Tables were created by Potto-GDC and later where translated by using latex2html versions 1.7. Then they were translated from html to php by toPHP script (our script). The oblique shock figures were generate by a new script that use *gd* (non graphical part of *gdc*) and produces a *gle* file. The simple operation is:

```
./obliqueFigur 1.4
```

and later use `gle ob.jpg` to generate a eps file. If you interested in this php scrip or the figure script drop me a line.

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Isentropic Flow

1.1 Regular Isentropic Flow Tables

1.1.1 Isentropic Flow for k=1.2

Table 1.1: Isentropic Flow k = 1.2

M	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	$\frac{\mathbf{A}}{\mathbf{A^\star}}$	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{A\times P}}{\mathbf{A^*\times P_0}}$	$\frac{\mathbf{F}}{\mathbf{F^*}}$
0.00	1.00000	1.00000	$5.9E{+}5$	1.00000	$5.9E{+}5$	$2.7E{+}5$
0.05	0.99975	0.99875	11.86	0.99850	11.84	5.397
0.10	0.99900	0.99501	5.953	0.99402	5.917	2.722
0.20	0.99602	0.98024	3.026	0.97633	2.954	1.407
0.25	0.99379	0.96933	2.451	0.96331	2.361	1.154
0.30	0.99108	0.95619	2.073	0.94766	1.965	0.98944
0.35	0.98790	0.94094	1.809	0.92955	1.681	0.87653
0.40	0.98425	0.92370	1.615	0.90915	1.468	0.79559
0.45	0.98015	0.90462	1.469	0.88667	1.302	0.73591
0.50	0.97561	0.88385	1.356	0.86230	1.170	0.69108
0.55	0.97064	0.86156	1.268	0.83627	1.060	0.65702
0.60	0.96525	0.83792	1.199	0.80880	0.96941	0.6310
0.65	0.95946	0.81309	1.144	0.78013	0.89216	0.61113
0.70	0.95329	0.78727	1.100	0.75049	0.82576	0.59605
0.75	0.94675	0.76062	1.067	0.72011	0.76806	0.58477
0.80	0.93985	0.73332	1.041	0.68921	0.71743	0.57655

Table 1.1: Isentropic Flow k = 1.2 (continue)

M	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	$\frac{A}{A^\star}$	$\frac{P}{P_0}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
0.85	0.93262	0.70554	1.022	0.65800	0.67263	0.57081
0.90	0.92507	0.67744	1.010	0.62668	0.63268	0.56711
0.95	0.91722	0.64919	1.002	0.59545	0.59683	0.56509
1.0	0.90909	0.62092	1.000	0.56447	0.56447	0.56447
1.05	0.90070	0.59278	1.002	0.53392	0.53511	0.56502
1.10	0.89206	0.56490	1.009	0.50393	0.50833	0.56656
1.15	0.88320	0.53739	1.019	0.47462	0.48381	0.56891
1.20	0.87413	0.51035	1.034	0.44611	0.46126	0.57196
1.25	0.86486	0.48388	1.052	0.41849	0.44046	0.57560
1.30	0.85543	0.45807	1.075	0.39184	0.42120	0.57973
1.35	0.84584	0.43297	1.101	0.36622	0.40332	0.58427
1.40	0.83612	0.40864	1.132	0.34167	0.38668	0.58915
1.45	0.82628	0.38515	1.166	0.31824	0.37114	0.59433
1.50	0.81633	0.36251	1.205	0.29593	0.35660	0.59974
1.55	0.80629	0.34076	1.248	0.27475	0.34297	0.60534
1.60	0.79618	0.31993	1.296	0.25472	0.33016	0.61110
1.65	0.78601	0.30001	1.349	0.23581	0.31810	0.61698
1.70	0.77580	0.28102	1.407	0.21801	0.30674	0.62295
1.75	0.76555	0.26295	1.470	0.20130	0.29600	0.62900
1.80	0.75529	0.24579	1.540	0.18564	0.28584	0.63509
1.85	0.74502	0.22953	1.615	0.17100	0.27622	0.64120
1.90	0.73475	0.21415	1.697	0.15734	0.26709	0.64733
1.95	0.72451	0.19962	1.787	0.14463	0.25842	0.65345
2.00	0.71429	0.18593	1.884	0.13281	0.25018	0.65956
2.25	0.66390	0.12898	2.504	0.085628	0.21439	0.68947
2.50	0.61538	0.088254	3.421	0.054310	0.18577	0.71774
2.75	0.56940	0.059851	4.767	0.034079	0.16245	0.74394
3.00	0.52632	0.040386	6.735	0.021256	0.14317	0.76789
3.25	0.48632	0.027203	9.602	0.013230	0.12703	0.78963
3.50	0.44944	0.018338	13.76	0.00824	0.11340	0.80925
3.75	0.41558	0.012396	19.76	0.00515	0.10177	0.82692
4.00	0.38462	0.00842	28.36	0.00324	0.091790	0.84280
4.25	0.35635	0.00575	40.61	0.00205	0.083155	0.85706

Table 1.1: Isentropic Flow k = 1.2 (continue)

M	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	$\frac{A}{A^\star}$	$\frac{P}{P_0}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
4.50	0.33058	0.00395	57.96	0.00131	0.075642	0.86989
4.75	0.30710	0.00273	82.34	0.000839	0.069070	0.88142
5.00	0.28571	0.00190	$1.2E{+}2$	0.000544	0.063290	0.89182
5.25	0.26622	0.00134	$1.6E{+}2$	0.000356	0.058184	0.90119
5.50	0.24845	0.000947	$2.3E{+}2$	0.000235	0.053653	0.90966
5.75	0.23222	0.000675	$3.2E{+}2$	0.000157	0.049616	0.91733
6.00	0.21739	0.000486	$4.4E{+}2$	0.000106	0.046006	0.92429
6.25	0.20382	0.000352	$6.0E{+}2$	$7.17E{-}5$	0.042765	0.93062
6.50	0.19139	0.000257	$8.1E{+}2$	$4.91E{-}5$	0.039846	0.93638
6.75	0.17998	0.000189	$1.1E{+}3$	$3.40E{-}5$	0.037209	0.94164
7.00	0.16949	0.000140	$1.5E{+}3$	$2.37E{-}5$	0.034819	0.94644
7.25	0.15984	0.000104	$2.0E{+}3$	$1.67E{-}5$	0.032647	0.95085
7.50	0.15094	$7.84E{-}5$	$2.6E{+}3$	$1.18E{-}5$	0.030668	0.95489
7.75	0.14273	$5.92E{-}5$	$3.4E{+}3$	$8.45E{-}6$	0.028860	0.95861
8.00	0.13514	$4.51E{-}5$	$4.5E{+}3$	$6.09E{-}6$	0.027204	0.96204
8.25	0.12810	$3.45E{-}5$	$5.8E{+}3$	$4.42E{-}6$	0.025684	0.96520
8.50	0.12158	$2.66E{-}5$	$7.5E{+}3$	$3.23E{-}6$	0.024286	0.96812
8.75	0.11552	$2.06E{-}5$	$9.7E{+}3$	$2.38E{-}6$	0.022997	0.97083
9.00	0.10989	$1.60E{-}5$	$1.2E{+}4$	$1.76E{-}6$	0.021806	0.97334
9.25	0.10464	$1.25E{-}5$	$1.6E{+}4$	$1.31E{-}6$	0.020704	0.97568
9.50	0.099751	$9.88E{-}6$	$2.0E{+}4$	0.0	0.019682	0.97785
9.75	0.095181	$7.81E{-}6$	$2.5E{+}4$	0.0	0.018733	0.97987
10.0	0.090909	$6.21E{-}6$	$3.2E{+}4$	0.0	0.017850	0.98176
20.0	0.024390	0.0	$2.2E{+}7$	0.0	0.00462	1.011
30.0	0.010989	0.0	$1.2E{+}9$	0.0	0.00207	1.016
40.0	0.00621	0.0	$2.0E{+}10$	0.0	0.00117	1.019
50.0	0.00398	0.0	$1.9E{+}11$	0.0	0.000747	1.019

1.1.2 Isentropic Flow for k=1.3

Table 1.2: Isentropic Flow k =1.3

M	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	$\frac{A}{A^\star}$	$\frac{P}{P_0}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
0.00	1.00000	1.00000	$5.9E+5$	1.00000	$5.9E+5$	$2.5E+5$
0.05	0.99963	0.99875	11.72	0.99838	11.70	5.104
0.10	0.99850	0.99502	5.886	0.99353	5.848	2.576
0.20	0.99404	0.98026	2.994	0.97441	2.917	1.334
0.25	0.99071	0.96937	2.426	0.96037	2.330	1.095
0.30	0.98668	0.95629	2.054	0.94355	1.938	0.94106
0.35	0.98196	0.94111	1.793	0.92413	1.657	0.83513
0.40	0.97656	0.92399	1.602	0.90233	1.446	0.75937
0.45	0.97052	0.90507	1.459	0.87839	1.281	0.70368
0.50	0.96386	0.88452	1.348	0.85255	1.149	0.66199
0.55	0.95659	0.86250	1.261	0.82506	1.041	0.63042
0.60	0.94877	0.83920	1.193	0.79620	0.95007	0.60639
0.65	0.94040	0.81479	1.139	0.76623	0.87311	0.58811
0.70	0.93153	0.78945	1.097	0.73540	0.80691	0.57431
0.75	0.92219	0.76337	1.064	0.70397	0.74933	0.56403
0.80	0.91241	0.73671	1.040	0.67218	0.69876	0.55658
0.85	0.90222	0.70965	1.021	0.64026	0.65398	0.55140
0.90	0.89166	0.68234	1.009	0.60842	0.61402	0.54808
0.95	0.88077	0.65494	1.002	0.57685	0.57814	0.54628
1.0	0.86957	0.62759	1.000	0.54573	0.54573	0.54573
1.05	0.85809	0.60041	1.002	0.51521	0.51630	0.54621
1.10	0.84638	0.57353	1.008	0.48542	0.48946	0.54755
1.15	0.83446	0.54705	1.018	0.45649	0.46487	0.54961
1.20	0.82237	0.52106	1.032	0.42850	0.44226	0.55225
1.25	0.81013	0.49565	1.049	0.40154	0.42140	0.55537
1.30	0.79777	0.47089	1.070	0.37566	0.40209	0.55890
1.35	0.78531	0.44683	1.095	0.35090	0.38416	0.56275
1.40	0.77280	0.42353	1.123	0.32730	0.36748	0.56687
1.45	0.76024	0.40102	1.154	0.30487	0.35191	0.57120
1.50	0.74766	0.37933	1.189	0.28361	0.33735	0.57570
1.55	0.73509	0.35849	1.228	0.26352	0.32372	0.58033
1.60	0.72254	0.33849	1.271	0.24457	0.31091	0.58505
1.65	0.71004	0.31935	1.318	0.22675	0.29887	0.58985

Table 1.2: Isentropic Flow k=1.3 (continue)

M	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	$\frac{A}{A^\star}$	$\frac{P}{P_0}$	$\frac{A \times P}{A^* \times P_0}$	$\frac{F}{F^*}$
1.70	0.69759	0.30107	1.369	0.21003	0.28753	0.59468
1.75	0.68522	0.28365	1.424	0.19436	0.27682	0.59953
1.80	0.67295	0.26706	1.484	0.17972	0.26671	0.60439
1.85	0.66077	0.25129	1.549	0.16605	0.25715	0.60924
1.90	0.64872	0.23633	1.618	0.15331	0.24808	0.61406
1.95	0.63679	0.22215	1.693	0.14147	0.23949	0.61885
2.00	0.62500	0.20874	1.773	0.13046	0.23133	0.62359
2.25	0.56838	0.15210	2.268	0.086453	0.19609	0.64636
2.50	0.51613	0.11029	2.954	0.056923	0.16818	0.66722
2.75	0.46852	0.079879	3.892	0.037425	0.14567	0.68597
3.00	0.42553	0.057957	5.160	0.024663	0.12725	0.70266
3.25	0.38694	0.042216	6.857	0.016335	0.11201	0.71742
3.50	0.35242	0.030918	9.110	0.010896	0.099263	0.73045
3.75	0.32161	0.022791	12.07	0.00733	0.088503	0.74193
4.00	0.29412	0.016920	15.94	0.00498	0.079346	0.75206
4.25	0.26959	0.012657	20.95	0.00341	0.071497	0.76101
4.50	0.24768	0.00954	27.39	0.00236	0.064723	0.76893
4.75	0.22808	0.00725	35.59	0.00165	0.058841	0.77596
5.00	0.21053	0.00555	45.96	0.00117	0.053704	0.78221
5.25	0.19477	0.00428	58.98	0.000834	0.049195	0.78779
5.50	0.18059	0.00333	75.22	0.000601	0.045217	0.79278
5.75	0.16780	0.00261	95.34	0.000437	0.041692	0.79725
6.00	0.15625	0.00205	$1.2E{+}2$	0.000321	0.038555	0.80128
6.25	0.14579	0.00163	$1.5E{+}2$	0.000238	0.035752	0.80491
6.50	0.13629	0.00130	$1.9E{+}2$	0.000178	0.033238	0.80819
6.75	0.12764	0.00105	$2.3E{+}2$	0.000134	0.030976	0.81117
7.00	0.11976	0.000847	$2.9E{+}2$	0.000101	0.028932	0.81388
7.25	0.11256	0.000689	$3.5E{+}2$	$7.75E{-}5$	0.027082	0.81635
7.50	0.10596	0.000563	$4.3E{+}2$	$5.97E{-}5$	0.025400	0.81860
7.75	0.099906	0.000463	$5.2E{+}2$	$4.62E{-}5$	0.023868	0.82066
8.00	0.094340	0.000382	$6.2E{+}2$	$3.61E{-}5$	0.022469	0.82256
8.25	0.089211	0.000317	$7.5E{+}2$	$2.83E{-}5$	0.021188	0.82430
8.50	0.084477	0.000265	$9.0E{+}2$	$2.23E{-}5$	0.020011	0.82590

Table 1.2: Isentropic Flow k=1.3 (continue)

M	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	$\frac{A}{A^\star}$	$\frac{P}{P_0}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
8.75	0.080100	0.000222	$1.1E{+}3$	$1.77E{-}5$	0.018929	0.82738
9.00	0.076046	0.000186	$1.3E{+}3$	$1.42E{-}5$	0.017932	0.82875
9.25	0.072284	0.000157	$1.5E{+}3$	$1.14E{-}5$	0.017010	0.83002
9.50	0.068788	0.000133	$1.8E{+}3$	$9.17E{-}6$	0.016157	0.83120
9.75	0.065533	0.000113	$2.1E{+}3$	$7.44E{-}6$	0.015366	0.83229
10.0	0.062500	$9.69E{-}5$	$2.4E{+}3$	$6.06E{-}6$	0.014631	0.83331
20.0	0.016393	0.0	$2.0E{+}5$	0.0	0.00375	0.84867
30.0	0.00735	0.0	$2.9E{+}6$	0.0	0.00167	0.85165
40.0	0.00415	0.0	$2.0E{+}7$	0.0	0.000942	0.85271
50.0	0.00266	0.0	$8.7E{+}7$	0.0	0.000604	0.85320

1.1.3 Isentropic Flow for k =1.4

Table 1.3: Isentropic Flow for k=1.4

M	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	$\frac{A}{A^\star}$	$\frac{P}{P_0}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
0.0	1.00000	1.00000	$5.8E{+}5$	1.00000	$5.8E{+}5$	$2.4E{+}5$
0.05	0.99950	0.99875	11.59	0.99825	11.57	4.838
0.1	0.99800	0.99502	5.822	0.99303	5.781	2.443
0.20	0.99206	0.98028	2.964	0.97250	2.882	1.268
0.25	0.98765	0.96942	2.403	0.95745	2.300	1.042
0.30	0.98232	0.95638	2.035	0.93947	1.912	0.89699
0.35	0.97609	0.94128	1.778	0.91877	1.634	0.79738
0.40	0.96899	0.92427	1.590	0.89561	1.424	0.72632
0.45	0.96108	0.90551	1.449	0.87027	1.261	0.67423
0.50	0.95238	0.88517	1.340	0.84302	1.130	0.63535
0.55	0.94295	0.86342	1.255	0.81417	1.022	0.60602
0.60	0.93284	0.84045	1.188	0.78400	0.93155	0.58377
0.65	0.92208	0.81644	1.136	0.75283	0.85493	0.56692
0.70	0.91075	0.79158	1.094	0.72093	0.78896	0.55425
0.75	0.89888	0.76604	1.062	0.68857	0.73155	0.54485
0.80	0.88652	0.73999	1.038	0.65602	0.68110	0.53807
0.85	0.87374	0.71361	1.021	0.62351	0.63640	0.53338

Table 1.3: Isentropic Flow for k=1.4 (continue)

M	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	$\frac{A}{A^\star}$	$\frac{P}{P_0}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
0.90	0.86059	0.68704	1.009	0.59126	0.59650	0.53039
0.95	0.84710	0.66044	1.002	0.55946	0.56066	0.52877
1.0	0.83333	0.63394	1.000	0.52828	0.52828	0.52828
1.05	0.81934	0.60765	1.002	0.49787	0.49888	0.52871
1.10	0.80515	0.58170	1.008	0.46835	0.47207	0.52989
1.15	0.79083	0.55616	1.017	0.43983	0.44751	0.53169
1.20	0.77640	0.53114	1.030	0.41238	0.42493	0.53399
1.25	0.76190	0.50670	1.047	0.38606	0.40411	0.53670
1.30	0.74738	0.48290	1.066	0.36091	0.38484	0.53974
1.35	0.73287	0.45980	1.089	0.33697	0.36697	0.54305
1.40	0.71839	0.43742	1.115	0.31424	0.35036	0.54655
1.45	0.70398	0.41581	1.144	0.29272	0.33486	0.55022
1.50	0.68966	0.39498	1.176	0.27240	0.32039	0.55401
1.55	0.67545	0.37495	1.212	0.25326	0.30685	0.55788
1.60	0.66138	0.35573	1.250	0.23527	0.29414	0.56182
1.65	0.64746	0.33731	1.292	0.21839	0.28221	0.56578
1.70	0.63371	0.31969	1.338	0.20259	0.27099	0.56976
1.75	0.62016	0.30287	1.386	0.18782	0.26042	0.57373
1.80	0.60680	0.28682	1.439	0.17404	0.25044	0.57768
1.85	0.59365	0.27153	1.495	0.16119	0.24102	0.58161
1.90	0.58072	0.25699	1.555	0.14924	0.23211	0.58549
1.95	0.56802	0.24317	1.619	0.13813	0.22367	0.58932
2.00	0.55556	0.23005	1.688	0.12780	0.21567	0.59309
2.25	0.49689	0.17404	2.096	0.086482	0.18130	0.61095
2.50	0.44444	0.13169	2.637	0.058528	0.15432	0.62693
2.75	0.39801	0.099939	3.338	0.039777	0.13276	0.64099
3.00	0.35714	0.076226	4.235	0.027224	0.11528	0.65326
3.25	0.32129	0.058510	5.369	0.018798	0.10093	0.66393
3.50	0.28986	0.045233	6.790	0.013111	0.089018	0.67320
3.75	0.26230	0.035235	8.552	0.00924	0.079035	0.68127
4.00	0.23810	0.027662	10.72	0.00659	0.070595	0.68830
4.25	0.21680	0.021886	13.36	0.00474	0.063401	0.69444
4.50	0.19802	0.017449	16.56	0.00346	0.057227	0.69983

Table 1.3: Isentropic Flow for k=1.4 (continue)

M	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	$\frac{A}{A^\star}$	$\frac{P}{P_0}$	$\frac{A \times P}{A^* \times P_0}$	$\frac{F}{F^*}$
4.75	0.18141	0.014016	20.41	0.00254	0.051891	0.70458
5.00	0.16667	0.011340	25.00	0.00189	0.047251	0.70876
5.25	0.15355	0.00924	30.45	0.00142	0.043194	0.71248
5.50	0.14184	0.00758	36.87	0.00107	0.039628	0.71578
5.75	0.13136	0.00625	44.40	0.000822	0.036477	0.71872
6.00	0.12195	0.00519	53.18	0.000633	0.033682	0.72136
6.25	0.11348	0.00434	63.37	0.000492	0.031191	0.72372
6.50	0.10582	0.00364	75.13	0.000385	0.028962	0.72586
6.75	0.098888	0.00308	88.66	0.000304	0.026960	0.72779
7.00	0.092593	0.00261	$1.0E{+}2$	0.000242	0.025156	0.72953
7.25	0.086862	0.00222	$1.2E{+}2$	0.000193	0.023525	0.73112
7.50	0.081633	0.00190	$1.4E{+}2$	0.000155	0.022046	0.73257
7.75	0.076849	0.00164	$1.6E{+}2$	0.000126	0.020700	0.73389
8.00	0.072464	0.00141	$1.9E{+}2$	0.000102	0.019473	0.73510
8.25	0.068435	0.00123	$2.2E{+}2$	$8.38E{-}5$	0.018350	0.73620
8.50	0.064725	0.00107	$2.5E{+}2$	$6.90E{-}5$	0.017321	0.73723
8.75	0.061303	0.000930	$2.9E{+}2$	$5.70E{-}5$	0.016375	0.73817
9.00	0.058140	0.000815	$3.3E{+}2$	$4.74E{-}5$	0.015504	0.73903
9.25	0.055210	0.000716	$3.7E{+}2$	$3.95E{-}5$	0.014700	0.73984
9.50	0.052493	0.000631	$4.2E{+}2$	$3.31E{-}5$	0.013957	0.74058
9.75	0.049969	0.000558	$4.8E{+}2$	$2.79E{-}5$	0.013268	0.74127
10.0	0.047619	0.000495	$5.4E{+}2$	$2.36E{-}5$	0.012628	0.74192
20.0	0.012346	$1.69E{-}5$	$1.5E{+}4$	0.0	0.00322	0.75151
30.0	0.00552	$2.27E{-}6$	$1.1E{+}5$	0.0	0.00143	0.75335
40.0	0.00312	0.0	$4.8E{+}5$	0.0	0.000808	0.75401
50.0	0.00200	0.0	$1.5E{+}6$	0.0	0.000517	0.75431

1.1.4 Isentropic Flow k=1.67

Table 1.4: Isentropic Flow k=1.67

M	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	$\frac{A}{A^\star}$	$\frac{P}{P_0}$	$\frac{A \times P}{A^* \times P_0}$	$\frac{F}{F^*}$
$0.E{+}$	1.00000	1.00000	$5.6E{+}5$	1.00000	$5.6E{+}5$	$2.1E{+}5$

Table 1.4: Isentropic Flow k=1.67 (continue)

M	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	$\frac{A}{A^\star}$	$\frac{P}{P_0}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
0.050	0.99916	0.99875	11.26	0.99792	11.24	4.228
0.10	0.99666	0.99502	5.661	0.99170	5.614	2.138
0.20	0.98678	0.98033	2.887	0.96737	2.793	1.116
0.25	0.97949	0.96955	2.344	0.94966	2.226	0.92075
0.30	0.97073	0.95663	1.989	0.92864	1.847	0.79561
0.35	0.96058	0.94174	1.741	0.90462	1.575	0.71039
0.40	0.94913	0.92503	1.560	0.87797	1.370	0.64999
0.45	0.93647	0.90668	1.424	0.84908	1.209	0.60605
0.50	0.92272	0.88688	1.320	0.81835	1.080	0.57352
0.55	0.90799	0.86583	1.239	0.78616	0.97421	0.54920
0.60	0.89238	0.84371	1.176	0.75291	0.88531	0.53092
0.65	0.87601	0.82072	1.126	0.71896	0.80968	0.51722
0.70	0.85900	0.79704	1.087	0.68465	0.74451	0.50702
0.75	0.84144	0.77285	1.058	0.65031	0.68774	0.49955
0.80	0.82345	0.74832	1.035	0.61620	0.63783	0.49421
0.85	0.80513	0.72360	1.019	0.58259	0.59359	0.49056
0.90	0.78657	0.69884	1.008	0.54969	0.55411	0.48826
0.95	0.76785	0.67417	1.002	0.51766	0.51867	0.48704
1.0	0.74906	0.64970	1.000	0.48667	0.48667	0.48667
1.05	0.73028	0.62554	1.002	0.45682	0.45765	0.48699
1.10	0.71157	0.60176	1.007	0.42820	0.43121	0.48785
1.15	0.69298	0.57846	1.015	0.40086	0.40704	0.48915
1.20	0.67458	0.55568	1.027	0.37485	0.38487	0.49078
1.25	0.65641	0.53349	1.041	0.35019	0.36446	0.49269
1.30	0.63851	0.51192	1.057	0.32687	0.34563	0.49480
1.35	0.62091	0.49101	1.077	0.30487	0.32821	0.49706
1.40	0.60365	0.47077	1.098	0.28418	0.31206	0.49944
1.45	0.58674	0.45123	1.122	0.26475	0.29705	0.50189
1.50	0.57021	0.43238	1.148	0.24655	0.28307	0.50439
1.55	0.55407	0.41424	1.177	0.22952	0.27004	0.50692
1.60	0.53833	0.39681	1.207	0.21361	0.25786	0.50945
1.65	0.52300	0.38006	1.240	0.19877	0.24646	0.51198
1.70	0.50809	0.36400	1.275	0.18495	0.23577	0.51449

Table 1.4: Isentropic Flow k=1.67 (continue)

M	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	$\frac{A}{A^\star}$	$\frac{P}{P_0}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
1.75	0.49360	0.34862	1.312	0.17208	0.22575	0.51697
1.80	0.47952	0.33389	1.351	0.16011	0.21632	0.51941
1.85	0.46587	0.31979	1.393	0.14898	0.20746	0.52180
1.90	0.45262	0.30632	1.436	0.13865	0.19911	0.52415
1.95	0.43979	0.29344	1.482	0.12905	0.19123	0.52644
2.00	0.42735	0.28115	1.530	0.12015	0.18380	0.52867
2.25	0.37093	0.22759	1.803	0.084419	0.15221	0.53896
2.50	0.32323	0.18532	2.135	0.059903	0.12788	0.54779
2.75	0.28301	0.15198	2.529	0.043013	0.10878	0.55527
3.00	0.24907	0.12560	2.990	0.031282	0.093543	0.56161
3.25	0.22034	0.10460	3.524	0.023048	0.081215	0.56697
3.50	0.19593	0.087791	4.134	0.017201	0.071115	0.57152
3.75	0.17510	0.074231	4.827	0.012998	0.062746	0.57540
4.00	0.15723	0.063214	5.608	0.00994	0.055742	0.57872
4.25	0.14183	0.054195	6.483	0.00769	0.049827	0.58158
4.50	0.12847	0.046759	7.456	0.00601	0.044789	0.58405
4.75	0.11684	0.040585	8.533	0.00474	0.040465	0.58621
5.00	0.10667	0.035424	9.721	0.00378	0.036730	0.58809
5.25	0.097719	0.031082	11.02	0.00304	0.033481	0.58974
5.50	0.089817	0.027406	12.45	0.00246	0.030640	0.59120
5.75	0.082809	0.024277	14.00	0.00201	0.028141	0.59249
6.00	0.076570	0.021598	15.68	0.00165	0.025933	0.59364
6.25	0.070993	0.019293	17.50	0.00137	0.023972	0.59467
6.50	0.065990	0.017299	19.47	0.00114	0.022223	0.59559
6.75	0.061488	0.015568	21.58	0.000957	0.020657	0.59641
7.00	0.057422	0.014056	23.85	0.000807	0.019249	0.59716
7.25	0.053739	0.012732	26.28	0.000684	0.017980	0.59784
7.50	0.050394	0.011568	28.87	0.000583	0.016831	0.59845
7.75	0.047346	0.010539	31.64	0.000499	0.015788	0.59901
8.00	0.044563	0.00963	34.58	0.000429	0.014838	0.59952
8.25	0.042015	0.00882	37.71	0.000370	0.013971	0.59998
8.50	0.039677	0.00810	41.02	0.000321	0.013177	0.60041
8.75	0.037526	0.00745	44.53	0.000280	0.012449	0.60081

Table 1.4: Isentropic Flow k=1.67 (continue)

M	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	$\frac{A}{A^\star}$	$\frac{P}{P_0}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
9.00	0.035543	0.00687	48.24	0.000244	0.011779	0.60117
9.25	0.033712	0.00635	52.15	0.000214	0.011161	0.60150
9.50	0.032017	0.00588	56.28	0.000188	0.010591	0.60181
9.75	0.030445	0.00545	60.62	0.000166	0.010063	0.60210
10.0	0.028986	0.00507	65.18	0.000147	0.00957	0.60237
20.0	0.00741	0.000661	$4.9E{+}2$	$4.90E{-}6$	0.00242	0.60631
30.0	0.00331	0.000198	$1.6E{+}3$	0.0	0.00108	0.60705
40.0	0.00186	$8.42E{-}5$	$3.9E{+}3$	0.0	0.000607	0.60732
50.0	0.00119	$4.33E{-}5$	$7.5E{+}3$	0.0	0.000388	0.60744

1.2 "Naughty Professor" Tables (NPT) for Isentropic Flow

1.2.1 NPT for Isentropic Flow k=1.2

Table 1.5: Naughty Professor for Isentropic flow k=1.2

M	Fn	$\frac{\rho R T_0}{P}$	$\left(\frac{P_0 A^*}{PA}\right)^2$	$\frac{RT_0}{P^2}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R\rho_0 P}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R{\rho_0}^2 T}\left(\frac{\dot{m}}{A}\right)^2$
$1.0E{-}6$	0.0	1	0	0	0	0
0.05	0.060083	1	0.00713	$2.15E{-}5$	0.00301	0.00301
0.1	0.12066	1.001	0.02856	0.000347	0.012206	0.012145
0.2	0.24533	1.004	0.11458	0.00575	0.051371	0.050355
0.25	0.31046	1.006	0.17943	0.014412	0.08338	0.080822
0.3	0.37818	1.009	0.25909	0.03088	0.12577	0.12026
0.35	0.44909	1.012	0.35379	0.05946	0.1808	0.17013
0.4	0.52379	1.016	0.4638	0.10604	0.25147	0.23229
0.45	0.60295	1.02	0.58946	0.17858	0.34168	0.30909
0.5	0.68728	1.025	0.73111	0.28778	0.45649	0.40347
0.55	0.77755	1.03	0.88918	0.44798	0.60246	0.51906
0.6	0.8746	1.036	1.064	0.6783	0.78813	0.66039
0.65	0.97935	1.042	1.256	1.004	1.025	0.83305
0.7	1.093	1.049	1.467	1.459	1.326	1.044

Table 1.5: Naughty Professor for Isentropic flow k=1.2 (continue)

$\mathbf{M}$	$\mathbf{Fn}$	$\frac{\rho \mathbf{RT_0}}{\mathbf{P}}$	$\left(\frac{\mathbf{P_0 A^*}}{\mathbf{PA}}\right)^{\mathbf{2}}$	$\frac{\mathbf{RT_0}}{\mathbf{P^2}}\left(\frac{\dot{\mathbf{m}}}{\mathbf{A}}\right)^{\mathbf{2}}$	$\frac{\mathbf{1}}{\mathbf{R}\rho_\mathbf{0}\mathbf{P}}\left(\frac{\dot{\mathbf{m}}}{\mathbf{A}}\right)^{\mathbf{2}}$	$\frac{\mathbf{1}}{\mathbf{R}\rho_\mathbf{0}{}^\mathbf{2}\mathbf{T}}\left(\frac{\dot{\mathbf{m}}}{\mathbf{A}}\right)^{\mathbf{2}}$
0.75	1.216	1.056	1.695	2.089	1.711	1.302
0.8	1.35	1.064	1.943	2.952	2.205	1.617
0.85	1.497	1.072	2.21	4.128	2.838	2.002
0.9	1.658	1.081	2.498	5.72	3.653	2.475
0.95	1.834	1.09	2.807	7.865	4.705	3.055
1	2.027	1.1	3.138	10.75	6.065	3.766
1.05	2.24	1.11	3.492	14.6	7.829	4.641
1.1	2.474	1.121	3.87	19.74	10.12	5.718
1.15	2.733	1.132	4.272	26.58	13.11	7.045
1.2	3.018	1.144	4.7	35.67	17.01	8.683
1.25	3.333	1.156	5.155	47.73	22.12	10.71
1.3	3.682	1.169	5.637	63.69	28.83	13.21
1.35	4.068	1.182	6.147	84.79	37.66	16.31
1.4	4.496	1.196	6.688	$1.1E{+}2$	49.3	20.15
1.45	4.97	1.21	7.26	$1.5E{+}2$	64.68	24.91
1.5	5.496	1.225	7.864	$2.E+2$	85.05	30.83
1.55	6.079	1.24	8.501	$2.6E{+}2$	$1.1E{+}2$	38.19
1.6	6.726	1.256	9.174	$3.5E{+}2$	$1.5E{+}2$	47.35
1.65	7.444	1.272	9.882	$4.6E{+}2$	$2.E+2$	58.75
1.7	8.242	1.289	10.63	$6.E+2$	$2.6E{+}2$	72.96
1.75	9.128	1.306	11.41	$7.9E{+}2$	$3.4E{+}2$	90.69
1.8	10.11	1.324	12.24	$1.E+3$	$4.6E{+}2$	$1.1E{+}2$
1.85	11.21	1.342	13.11	$1.4E{+}3$	$6.1E{+}2$	$1.4E{+}2$
1.9	12.42	1.361	14.02	$1.8E{+}3$	$8.2E{+}2$	$1.7E{+}2$
1.95	13.77	1.38	14.97	$2.4E{+}3$	$1.1E{+}3$	$2.2E{+}2$
2	15.27	1.4	15.98	$3.1E{+}3$	$1.5E{+}3$	$2.7E{+}2$
2.25	25.69	1.506	21.76	$1.2E{+}4$	$6.4E{+}3$	$8.3E{+}2$
2.5	43.33	1.625	28.98	$4.5E{+}4$	$2.9E{+}4$	$2.5E{+}3$
2.75	73.07	1.756	37.89	$1.7E{+}5$	$1.3E{+}5$	$7.8E{+}3$
3	$1.2E{+}2$	1.9	48.79	$6.1E{+}5$	$5.9E{+}5$	$2.4E{+}4$
3.25	$2.1E{+}2$	2.056	61.97	$2.2E{+}6$	$2.7E{+}6$	$7.2E{+}4$
3.5	$3.4E{+}2$	2.225	77.77	$7.6E{+}6$	$1.2E{+}7$	$2.2E{+}5$

Table 1.5: Naughty Professor for Isentropic flow k=1.2 (continue)

M	Fn	$\frac{\rho R T_0}{P}$	$\left(\frac{P_0 A^*}{PA}\right)^2$	$\frac{RT_0}{P^2}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R\rho_0 P}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R{\rho_0}^2 T}\left(\frac{\dot{m}}{A}\right)^2$
3.75	$5.6E{+}2$	2.406	96.54	$2.6E{+}7$	$5.1E{+}7$	$6.4E{+}5$
4	$9.2E{+}2$	2.6	$1.2E{+}2$	$8.4E{+}7$	$2.2E{+}8$	$1.8E{+}6$
4.25	$1.5E{+}3$	2.806	$1.4E{+}2$	$2.7E{+}8$	$9.E+8$	$5.2E{+}6$
4.5	$2.4E{+}3$	3.025	$1.7E{+}2$	$8.2E{+}8$	$3.6E{+}9$	$1.4E{+}7$
4.75	$3.8E{+}3$	3.256	$2.1E{+}2$	$2.5E{+}9$	$1.4E{+}10$	$3.8E{+}7$
5	$5.9E{+}3$	3.5	$2.5E{+}2$	$7.2E{+}9$	$5.3E{+}10$	$1.E+8$
5.25	$9.1E{+}3$	3.756	$3.E+2$	$2.1E{+}10$	$2.E{+}11$	$2.6E{+}8$
5.5	$1.4E{+}4$	4.025	$3.5E{+}2$	$5.7E{+}10$	$6.9E{+}11$	$6.6E{+}8$
5.75	$2.1E{+}4$	4.306	$4.1E{+}2$	$1.5E{+}11$	$2.4E{+}12$	$1.6E{+}9$
6	$3.2E{+}4$	4.6	$4.7E{+}2$	$4.E{+}11$	$8.E{+}12$	$3.9E{+}9$
6.25	$4.7E{+}4$	4.906	$5.5E{+}2$	$1.E{+}12$	$2.6E{+}13$	$9.1E{+}9$
6.5	$6.9E{+}4$	5.225	$6.3E{+}2$	$2.5E{+}12$	$8.2E{+}13$	$2.1E{+}10$
6.75	$1.E+5$	5.556	$7.2E{+}2$	$6.2E{+}12$	$2.5E{+}14$	$4.7E{+}10$
7	$1.5E{+}5$	5.9	$8.2E{+}2$	$1.5E{+}13$	$7.5E{+}14$	$1.E{+}11$
7.25	$2.1E{+}5$	6.256	$9.4E{+}2$	$3.4E{+}13$	$2.2E{+}15$	$2.3E{+}11$
7.5 $3E+5$		6.625	$1.1E{+}3$	$7.7E{+}13$	$6.2E{+}15$	$4.8E{+}11$
7.75	$4.2E{+}5$	7.006	$1.2E{+}3$	$1.7E{+}14$	$1.7E{+}16$	$1.E{+}12$
8	$5.8E{+}5$	7.4	$1.4E{+}3$	$3.8E{+}14$	$4.6E{+}16$	$2.1E{+}12$
$8.258E+5$		7.806	$1.5E{+}3$	$8.1E{+}14$	$1.2E{+}17$	$4.2E{+}12$
8.5	$1.1E{+}6$	8.225	$1.7E{+}3$	$1.7E{+}15$	$3.1E{+}17$	$8.3E{+}12$
8.75	$1.5E{+}6$	8.656	$1.9E{+}3$	$3.6E{+}15$	$7.9E{+}17$	$1.6E{+}13$
9	$2.E+6$	9.1	$2.1E{+}3$	$7.2E{+}15$	$2.E{+}18$	$3.1E{+}13$
9.25	$2.7E{+}6$	9.556	$2.3E{+}3$	$1.5E{+}16$	$4.7E{+}18$	$6.E{+}13$
9.5	$3.7E{+}6$	10.02	$2.6E{+}3$	$2.9E{+}16$	$1.1E{+}19$	$1.1E{+}14$
9.75	$4.9E{+}6$	10.51	$2.8E{+}3$	$5.6E{+}16$	$2.6E{+}19$	$2.1E{+}14$
10	$6.4E{+}6$	$0.11E{+}2$	$3.1E{+}3$	$1.1E{+}17$	$6.1E{+}19$	$3.8E{+}14$
20	$1.8E{+}10$	$0.41E{+}2$	$4.7E{+}4$	$1.2E{+}25$	$1.3E{+}30$	$1.1E{+}22$
30	$2.1E{+}12$	$0.91E{+}2$	$2.3E{+}5$	$8.9E{+}29$	$2.2E{+}36$	$3.5E{+}26$
40	$6.6E{+}13$	$1.6E{+}2$	$7.3E{+}5$	$2.7E{+}33$	$6.3E{+}40$	$5.8E{+}29$
50	$9.5E{+}14$	$2.5E{+}2$	$1.8E{+}6$	$1.3E{+}36$	$1.9E{+}44$	$1.9E{+}32$

1.2.2 NPT for Isentropic Flow k=1.3

Table 1.6: NPT for Isentropic Flow k=1.3

$\mathbf{M}$	$\mathbf{Fn}$	$\frac{\rho \mathbf{RT_0}}{\mathbf{P}}$	$\left(\frac{\mathbf{P_0A^*}}{\mathbf{PA}}\right)^2$	$\frac{\mathbf{RT_0}}{\mathbf{P^2}}\left(\frac{\dot{\mathbf{m}}}{\mathbf{A}}\right)^2$	$\frac{\mathbf{1}}{\mathbf{R}\rho_\mathbf{0}\mathbf{P}}\left(\frac{\dot{\mathbf{m}}}{\mathbf{A}}\right)^2$	$\frac{\mathbf{1}}{\mathbf{R}\rho_\mathbf{0}{}^\mathbf{2}\mathbf{T}}\left(\frac{\dot{\mathbf{m}}}{\mathbf{A}}\right)^2$
$1.0E{-}6$	$1.300E{-}6$	1	0	0	0	0
0.05	0.065094	1	0.0073	$2.38E{-}5$	0.00326	0.00326
0.1	0.13075	1.002	0.029242	0.000385	0.013236	0.01317
0.2	0.26603	1.006	0.11749	0.0064	0.05587	0.054767
0.25	0.33684	1.009	0.1842	0.016076	0.090877	0.088094
0.3	0.41057	1.014	0.26633	0.034534	0.13743	0.13142
0.35	0.48789	1.018	0.36425	0.066696	0.19814	0.18647
0.4	0.56949	1.024	0.47838	0.11934	0.27648	0.25546
0.45	0.6561	1.03	0.60921	0.20173	0.37697	0.34119
0.5	0.74852	1.038	0.75732	0.32639	0.50552	0.44714
0.55	0.84758	1.045	0.92331	0.51023	0.66978	0.57769
0.6	0.95422	1.054	1.108	0.77598	0.8797	0.73824
0.65	1.069	1.063	1.312	1.154	1.148	0.93552
0.7	1.194	1.074	1.536	1.685	1.492	1.178
0.75	1.33	1.084	1.781	2.423	1.933	1.476
0.8	1.478	1.096	2.048	3.441	2.499	1.841
0.85	1.639	1.108	2.338	4.833	3.229	2.291
0.9	1.816	1.122	2.652	6.728	4.169	2.845
0.95	2.009	1.135	2.992	9.291	5.383	3.526
1	2.221	1.15	3.358	12.75	6.955	4.365
1.05	2.454	1.165	3.751	17.38	8.993	5.4
1.1	2.71	1.181	4.174	23.58	11.64	6.676
1.15	2.992	1.198	4.627	31.86	15.08	8.25
1.2	3.301	1.216	5.113	42.87	19.57	10.2
1.25	3.643	1.234	5.631	57.47	25.42	12.6
1.3	4.018	1.254	6.185	76.82	33.06	15.57
1.35	4.432	1.273	6.776	$1.E{+}2$	43.06	19.24
1.4	4.888	1.294	7.405	$1.4E{+}2$	56.16	23.78
1.45	5.391	1.315	8.075	$1.8E{+}2$	73.33	29.41
1.5	5.945	1.338	8.787	$2.4E{+}2$	95.86	36.36
1.55	6.556	1.36	9.543	$3.2E{+}2$	$1.3E{+}2$	44.98
1.6	7.229	1.384	10.34	$4.2E{+}2$	$1.6E{+}2$	55.64
1.65	7.971	1.408	11.2	$5.5E{+}2$	$2.2E{+}2$	68.83

Table 1.6: NPT for Isentropic Flow k=1.3 (continue)

M	Fn	$\frac{\rho RT_0}{P}$	$\left(\frac{P_0A^*}{PA}\right)^2$	$\frac{RT_0}{P^2}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R\rho_0 P}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R{\rho_0}^2 T}\left(\frac{\dot{m}}{A}\right)^2$
1.7	8.789	1.434	12.1	$7.2E+2$	$2.8E+2$	85.17
1.75	9.689	1.459	13.05	$9.4E+2$	$3.7E+2$	$1.1E+2$
1.8	10.68	1.486	14.06	$1.2E+3$	$4.9E+2$	$1.3E+2$
1.85	11.77	1.513	15.12	$1.6E+3$	$6.4E+2$	$1.6E+2$
1.9	12.98	1.542	16.25	$2.1E+3$	$8.4E+2$	$2.E+2$
1.95	14.3	1.57	17.44	$2.7E+3$	$1.1E+3$	$2.5E+2$
2	15.76	1.6	18.69	$3.6E+3$	$1.5E+3$	$3.1E+2$
2.25	25.51	1.759	26.01	$1.3E+4$	$5.8E+3$	$8.8E+2$
2.5	41.02	1.938	35.36	$4.6E+4$	$2.3E+4$	$2.5E+3$
2.75	65.39	2.134	47.13	$1.5E+5$	$8.8E+4$	$7.E+3$
3	$1.E+2$	2.35	61.75	$5.1E+5$	$3.3E+5$	$1.9E+4$
3.25	$1.6E+2$	2.584	79.7	$1.6E+6$	$1.2E+6$	$5.1E+4$
3.5	$2.5E+2$	2.838	$1.E+2$	$4.8E+6$	$4.3E+6$	$1.3E+5$
3.75	$3.8E+2$	3.109	$1.3E+2$	$1.4E+7$	$1.5E+7$	$3.4E+5$
4	$5.7E+2$	3.4	$1.6E+2$	$3.9E+7$	$5.E+7$	$8.4E+5$
4.25	$8.4E+2$	3.709	$2.E+2$	$1.1E+8$	$1.6E+8$	$2.E+6$
4.5	$1.2E+3$	4.037	$2.4E+2$	$2.8E+8$	$4.9E+8$	$4.7E+6$
4.75	$1.8E+3$	4.384	$2.9E+2$	$7.1E+8$	$1.5E+9$	$1.1E+7$
5	$2.6E+3$	4.75	$3.5E+2$	$1.7E+9$	$4.3E+9$	$2.4E+7$
5.25	$3.6E+3$	5.134	$4.1E+2$	$4.1E+9$	$1.2E+10$	$5.2E+7$
5.5	$5.1E+3$	5.538	$4.9E+2$	$9.6E+9$	$3.3E+10$	$1.1E+8$
5.75	$7.E+3$	5.959	$5.8E+2$	$2.2E+10$	$8.6E+10$	$2.2E+8$
6	$9.6E+3$	6.4	$6.7E+2$	$4.8E+10$	$2.2E+11$	$4.5E+8$
6.25	$1.3E+4$	6.859	$7.8E+2$	$1.E+11$	$5.5E+11$	$9.E+8$
6.5	$1.8E+4$	7.338	$9.1E+2$	$2.1E+11$	$1.3E+12$	$1.7E+9$
6.75	$2.3E+4$	7.834	$1.E+3$	$4.4E+11$	$3.2E+12$	$3.3E+9$
7	$3.1E+4$	8.35	$1.2E+3$	$8.9E+11$	$7.3E+12$	$6.2E+9$
7.25	$4.1E+4$	8.884	$1.4E+3$	$1.7E+12$	$1.7E+13$	$1.1E+10$
7.5	$5.3E+4$	9.438	$1.5E+3$	$3.4E+12$	$3.7E+13$	$2.1E+10$
7.75	$6.9E+4$	10.01	$1.8E+3$	$6.4E+12$	$7.9E+13$	$3.7E+10$
8	$8.9E+4$	10.6	$2.E+3$	$1.2E+13$	$1.7E+14$	$6.4E+10$
8.25	$1.1E+5$	11.21	$2.2E+3$	$2.2E+13$	$3.5E+14$	$1.1E+11$
8.5	$1.4E+5$	11.84	$2.5E+3$	$4.E+13$	$7.1E+14$	$1.9E+11$

Table 1.6: NPT for Isentropic Flow k=1.3 (continue)

M	Fn	$\frac{\rho RT_0}{P}$	$\left(\frac{P_0A^*}{PA}\right)^2$	$\frac{RT_0}{P^2}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R\rho_0 P}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R\rho_0{}^2 T}\left(\frac{\dot{m}}{A}\right)^2$
8.75	1.8E+5	12.48	2.8E+3	7.1E+13	1.4E+15	3.2E+11
9	2.3E+5	13.15	3.1E+3	1.2E+14	2.8E+15	5.2E+11
9.25	2.8E+5	13.83	3.5E+3	2.1E+14	5.5E+15	8.6E+11
9.5	3.5E+5	14.54	3.8E+3	3.7E+14	1.E+16	1.4E+12
9.75	4.4E+5	15.26	4.2E+3	6.2E+14	2.E+16	2.2E+12
10	5.4E+5	16.	4.7E+3	1.E+15	3.7E+16	3.5E+12
20	1.8E+8	61.	7.1E+4	1.8E+21	1.4E+24	1.5E+18
30	5.9E+9	1.4E+2	3.6E+5	9.5E+24	4.7E+28	3.6E+21
40	7.E+10	2.4E+2	1.1E+6	4.3E+27	8.E+31	9.2E+23
50	4.8E+11	3.8E+2	2.7E+6	4.9E+29	2.6E+34	6.8E+25

1.2.3 NPT for Isentropic Flow k=1.4

Table 1.7: NPT for Isentropic flow

M	Fn	$\frac{\rho RT_0}{P}$	$\left(\frac{P_0A^*}{PA}\right)^2$	$\frac{RT_0}{P^2}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R\rho_0 P}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R\rho_0{}^2 T}\left(\frac{\dot{m}}{A}\right)^2$
1.E−6	1.4E−6	1.	0.	0.	0.	0.
0.05	0.070106	1.001	0.00747	2.62E−5	0.00352	0.00351
0.1	0.14084	1.002	0.02992	0.000424	0.014268	0.014197
0.2	0.28677	1.008	0.12039	0.00707	0.060404	0.059212
0.25	0.36329	1.012	0.18896	0.017813	0.09846	0.095449
0.3	0.44309	1.018	0.27358	0.038365	0.14927	0.14276
0.35	0.5269	1.024	0.37474	0.074314	0.21584	0.20316
0.4	0.6155	1.032	0.49305	0.13342	0.30214	0.27926
0.45	0.70969	1.04	0.62915	0.22634	0.41338	0.37432
0.5	0.81034	1.05	0.78382	0.36764	0.55637	0.49249
0.55	0.91838	1.06	0.95791	0.57709	0.73995	0.63889
0.6	1.035	1.072	1.152	0.88142	0.97562	0.81996
0.65	1.161	1.085	1.368	1.317	1.278	1.044
0.7	1.297	1.098	1.607	1.931	1.667	1.32
0.75	1.446	1.113	1.869	2.79	2.168	1.661
0.8	1.607	1.128	2.156	3.979	2.813	2.082
0.85	1.784	1.145	2.469	5.613	3.646	2.602

Table 1.7: ?? (continue)

$\mathbf{M}$	$\mathbf{Fn}$	$\frac{\rho\mathbf{RT_0}}{\mathbf{P}}$	$\left(\frac{\mathbf{P_0A^*}}{\mathbf{PA}}\right)^2$	$\frac{\mathbf{RT_0}}{\mathbf{P^2}}\left(\frac{\dot{\mathbf{m}}}{\mathbf{A}}\right)^2$	$\frac{\mathbf{1}}{\mathbf{R\rho_0P}}\left(\frac{\dot{\mathbf{m}}}{\mathbf{A}}\right)^2$	$\frac{\mathbf{1}}{\mathbf{R\rho_0{}^2T}}\left(\frac{\dot{\mathbf{m}}}{\mathbf{A}}\right)^2$
0.9	1.977	1.162	2.81	7.846	4.721	3.244
0.95	2.188	1.181	3.181	10.88	6.112	4.037
1	2.419	1.2	3.583	14.98	7.913	5.016
1.05	2.673	1.22	4.018	20.5	10.25	6.227
1.1	2.95	1.242	4.487	27.9	13.28	7.723
1.15	3.255	1.264	4.993	37.8	17.21	9.571
1.2	3.59	1.288	5.538	50.97	22.32	11.86
1.25	3.957	1.312	6.124	68.48	28.97	14.68
1.3	4.36	1.338	6.752	91.66	37.61	18.16
1.35	4.802	1.365	7.426	$1.2E{+}2$	48.87	22.47
1.4	5.287	1.392	8.147	$1.6E{+}2$	63.53	27.79
1.45	5.819	1.421	8.918	$2.2E{+}2$	82.61	34.35
1.5	6.402	1.45	9.742	$2.9E{+}2$	$1.1E{+}2$	42.45
1.55	7.042	1.481	10.62	$3.8E{+}2$	$1.4E{+}2$	52.44
1.6	7.743	1.512	11.56	$4.9E{+}2$	$1.8E{+}2$	64.75
1.65	8.511	1.545	12.56	$6.5E{+}2$	$2.4E{+}2$	79.91
1.7	9.352	1.578	13.62	$8.5E{+}2$	$3.1E{+}2$	98.58
1.75	10.27	1.613	14.75	$1.1E{+}3$	$4.E{+}2$	$1.2E{+}2$
1.8	11.28	1.648	15.94	$1.4E{+}3$	$5.2E{+}2$	$1.5E{+}2$
1.85	12.38	1.685	17.21	$1.9E{+}3$	$6.8E{+}2$	$1.8E{+}2$
1.9	13.58	1.722	18.56	$2.4E{+}3$	$8.8E{+}2$	$2.3E{+}2$
1.95	14.9	1.761	19.99	$3.2E{+}3$	$1.1E{+}3$	$2.8E{+}2$
2	16.33	1.8	21.5	$4.1E{+}3$	$1.5E{+}3$	$3.4E{+}2$
2.25	25.68	2.012	30.42	$1.4E{+}4$	$5.4E{+}3$	$9.5E{+}2$
2.5	39.87	2.25	41.99	$4.8E{+}4$	$1.9E{+}4$	$2.6E{+}3$
2.75	61.06	2.512	56.74	$1.5E{+}5$	$6.7E{+}4$	$6.7E{+}3$
3	92.2	2.8	75.25	$4.6E{+}5$	$2.2E{+}5$	$1.7E{+}4$
3.25	$1.4E{+}2$	3.112	98.17	$1.3E{+}6$	$7.2E{+}5$	$4.2E{+}4$
3.5	$2.E+2$	3.45	$1.3E{+}2$	$3.6E{+}6$	$2.2E{+}6$	$1.E{+}5$
3.75	$2.9E{+}2$	3.812	$1.6E{+}2$	$9.7E{+}6$	$6.5E{+}6$	$2.3E{+}5$
4	$4.1E{+}2$	4.2	$2.E{+}2$	$2.5E{+}7$	$1.9E{+}7$	$5.2E{+}5$
4.25	$5.8E{+}2$	4.612	$2.5E{+}2$	$6.1E{+}7$	$5.1E{+}7$	$1.1E{+}6$
4.5	$8.1E{+}2$	5.05	$3.1E{+}2$	$1.4E{+}8$	$1.4E{+}8$	$2.4E{+}6$

Table 1.7: ?? (continue)

M	Fn	$\frac{\rho RT_0}{P}$	$\left(\frac{P_0A^*}{PA}\right)^2$	$\frac{RT_0}{P^2}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R\rho_0 P}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R\rho_0{}^2 T}\left(\frac{\dot{m}}{A}\right)^2$
4.75	1.1E+3	5.512	3.7E+2	3.3E+8	3.5E+8	4.9E+6
5	1.5E+3	6.	4.5E+2	7.3E+8	8.6E+8	9.8E+6
5.25	2.$E+3$	6.512	5.4E+2	1.6E+9	2.1E+9	1.9E+7
5.5	2.7E+3	7.05	6.4E+2	3.3E+9	4.8E+9	3.7E+7
5.75	3.6E+3	7.612	7.5E+2	6.8E+9	1.1E+10	6.9E+7
6	4.6E+3	8.2	8.8E+2	1.4E+10	2.4E+10	1.3E+8
6.25	6.$E+3$	8.812	1.E+3	2.6E+10	5.2E+10	2.3E+8
6.5	7.7E+3	9.45	1.2E+3	5.E+10	1.1E+11	4.E+8
6.75	9.8E+3	10.11	1.4E+3	9.4E+10	2.2E+11	6.9E+8
7	1.2E+4	10.8	1.6E+3	1.7E+11	4.5E+11	1.2E+9
7.25	1.5E+4	11.51	1.8E+3	3.1E+11	8.9E+11	2.E+9
7.5	1.9E+4	12.25	2.1E+3	5.5E+11	1.7E+12	3.3E+9
7.75	2.4E+4	13.01	2.3E+3	9.5E+11	3.2E+12	5.3E+9
8	2.9E+4	13.8	2.6E+3	1.6E+12	6.E+12	8.5E+9
8.25	3.6E+4	14.61	3.E+3	2.8E+12	1.1E+13	1.4E+10
8.5	4.4E+4	15.45	3.3E+3	4.6E+12	2.E+13	2.1E+10
8.75	5.3E+4	16.31	3.7E+3	7.5E+12	3.5E+13	3.3E+10
9	6.4E+4	17.2	4.2E+3	1.2E+13	6.2E+13	5.1E+10
9.25	7.7E+4	18.11	4.6E+3	2.E+13	1.1E+14	7.7E+10
9.5	9.2E+4	19.05	5.1E+3	3.1E+13	1.8E+14	1.2E+11
9.75	1.1E+5	20.01	5.7E+3	4.9E+13	3.1E+14	1.7E+11
10	1.3E+5	21	6.3E+3	7.5E+13	5.1E+14	2.5E+11
20	1.5E+7	81	9.7E+4	1.5E+19	7.6E+20	1.3E+16
30	2.5E+8	1.8E+2	4.9E+5	2.2E+22	3.5E+24	8.E+18
40	1.9E+9	3.2E+2	1.5E+6	3.8E+24	1.5E+27	7.9E+20
50	8.8E+9	5.$E+2$	3.7E+6	2.1E+26	1.6E+29	2.8E+22

1.2.4 NPT for Isentropic Flow k=1.67

Table 1.8: NPT for Isentropic Flow

M	Fn	$\frac{\rho RT_0}{P}$	$\left(\frac{P_0A^*}{PA}\right)^2$	$\frac{RT_0}{P^2}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R\rho_0 P}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R\rho_0{}^2 T}\left(\frac{\dot{m}}{A}\right)^2$
1.E−6	1.67E−6	1	0	0	0	0

Table 1.8: NPT for Isentropic Flow (continue)

M	Fn	$\frac{\rho R T_0}{P}$	$\left(\frac{P_0 A^*}{P A}\right)^2$	$\frac{R T_0}{P^2}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R \rho_0 P}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R {\rho_0}^2 T}\left(\frac{\dot{m}}{A}\right)^2$
0.05	0.08364	1.001	0.00791	$3.31E{-}5$	0.0042	0.00419
0.1	0.16812	1.003	0.031733	0.000537	0.017066	0.016981
0.2	0.34298	1.013	0.1282	0.00903	0.072815	0.071383
0.25	0.4351	1.021	0.2018	0.022877	0.11937	0.11573
0.3	0.53155	1.03	0.29322	0.049609	0.18219	0.17429
0.35	0.63327	1.041	0.40332	0.096853	0.26546	0.24999
0.4	0.74124	1.054	0.53315	0.17541	0.37473	0.34664
0.45	0.8565	1.068	0.68388	0.30041	0.51735	0.46907
0.5	0.98013	1.084	0.85688	0.49292	0.70293	0.62342
0.55	1.113	1.101	1.054	0.78198	0.94403	0.81737
0.6	1.257	1.121	1.276	1.208	1.257	1.061
0.65	1.413	1.142	1.525	1.824	1.663	1.365
0.7	1.582	1.164	1.804	2.705	2.19	1.746
0.75	1.767	1.188	2.114	3.952	2.874	2.221
0.8	1.967	1.214	2.458	5.697	3.761	2.815
0.85	2.186	1.242	2.838	8.123	4.913	3.555
0.9	2.425	1.271	3.257	11.47	6.406	4.477
0.95	2.686	1.302	3.717	16.05	8.343	5.624
1	2.97	1.335	4.222	22.3	10.85	7.051
1.05	3.28	1.369	4.775	30.76	14.1	8.823
1.1	3.619	1.405	5.378	42.18	18.31	11.02
1.15	3.988	1.443	6.036	57.49	23.76	13.74
1.2	4.391	1.482	6.751	77.94	30.8	17.11
1.25	4.83	1.523	7.528	$1.1E{+}2$	39.88	21.28
1.3	5.307	1.566	8.371	$1.4E{+}2$	51.6	26.42
1.35	5.827	1.611	9.283	$1.9E{+}2$	66.69	32.75
1.4	6.392	1.657	10.27	$2.5E{+}2$	86.1	40.53
1.45	7.006	1.704	11.33	$3.3E{+}2$	$1.1E{+}2$	50.09
1.5	7.672	1.754	12.48	$4.4E{+}2$	$1.4E{+}2$	61.82
1.55	8.395	1.805	13.71	$5.8E{+}2$	$1.8E{+}2$	76.16
1.6	9.178	1.858	15.04	$7.6E{+}2$	$2.4E{+}2$	93.69
1.65	10.03	1.912	16.46	$9.9E{+}2$	$3.E{+}2$	$1.2E{+}2$
1.7	10.94	1.968	17.99	$1.3E{+}3$	$3.9E{+}2$	$1.4E{+}2$

Table 1.8: NPT for Isentropic Flow (continue)

M	Fn	$\frac{\rho RT_0}{P}$	$\left(\frac{P_0 A^*}{PA}\right)^2$	$\frac{RT_0}{P^2}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R\rho_0 P}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R{\rho_0}^2 T}\left(\frac{\dot{m}}{A}\right)^2$
1.75	11.93	2.026	19.62	$1.7E{+}3$	$5.E{+}2$	$1.7E{+}2$
1.8	13	2.085	21.37	$2.2E{+}3$	$6.3E{+}2$	$2.1E{+}2$
1.85	14.15	2.147	23.23	$2.8E{+}3$	$8.1E{+}2$	$2.6E{+}2$
1.9	15.4	2.209	25.22	$3.6E{+}3$	$1.E{+}3$	$3.1E{+}2$
1.95	16.73	2.274	27.35	$4.6E{+}3$	$1.3E{+}3$	$3.8E{+}2$
2	18.17	2.34	29.6	$5.9E{+}3$	$1.6E{+}3$	$4.6E{+}2$
2.25	27.11	2.696	43.16	$1.9E{+}4$	$5.2E{+}3$	$1.2E{+}3$
2.5	39.62	3.094	61.15	$5.7E{+}4$	$1.6E{+}4$	$2.9E{+}3$
2.75	56.8	3.533	84.51	$1.6E{+}5$	$4.5E{+}4$	$6.8E{+}3$
3	79.93	4.015	$1.1E{+}2$	$4.4E{+}5$	$1.2E{+}5$	$1.5E{+}4$
3.25	$1.1E{+}2$	4.538	$1.5E{+}2$	$1.1E{+}6$	$3.2E{+}5$	$3.3E{+}4$
3.5	$1.5E{+}2$	5.104	$2.E{+}2$	$2.7E{+}6$	$7.9E{+}5$	$6.9E{+}4$
3.75	$2.E+2$	5.711	$2.5E{+}2$	$6.2E{+}6$	$1.9E{+}6$	$1.4E{+}5$
4	$2.7E{+}2$	6.36	$3.2E{+}2$	$1.4E{+}7$	$4.3E{+}6$	$2.7E{+}5$
4.25	$3.5E{+}2$	7.051	$4.E{+}2$	$2.9E{+}7$	$9.4E{+}6$	$5.1E{+}5$
4.5	$4.5E{+}2$	7.784	$5.E{+}2$	$6.E{+}7$	$2.E{+}7$	$9.4E{+}5$
4.75	$5.7E{+}2$	8.558	$6.1E{+}2$	$1.2E{+}8$	$4.1E{+}7$	$1.7E{+}6$
5	$7.2E{+}2$	9.375	$7.4E{+}2$	$2.3E{+}8$	$8.3E{+}7$	$2.9E{+}6$
5.25	$9.E+2$	10.23	$8.9E{+}2$	$4.3E{+}8$	$1.6E{+}8$	$5.E{+}6$
5.5	$1.1E{+}3$	11.13	$1.1E{+}3$	$8.E{+}8$	$3.E{+}8$	$8.3E{+}6$
5.75	$1.4E{+}3$	12.08	$1.3E{+}3$	$1.4E{+}9$	$5.6E{+}8$	$1.4E{+}7$
6	$1.7E{+}3$	13.06	$1.5E{+}3$	$2.5E{+}9$	$1.E{+}9$	$2.2E{+}7$
6.25	$2.E+3$	14.09	$1.7E{+}3$	$4.3E{+}9$	$1.8E{+}9$	$3.5E{+}7$
6.5	$2.4E{+}3$	15.15	$2.E{+}3$	$7.2E{+}9$	$3.1E{+}9$	$5.4E{+}7$
6.75	$2.9E{+}3$	16.26	$2.3E{+}3$	$1.2E{+}10$	$5.3E{+}9$	$8.3E{+}7$
7	$3.5E{+}3$	17.41	$2.7E{+}3$	$1.9E{+}10$	$8.9E{+}9$	$1.3E{+}8$
7.25	$4.1E{+}3$	18.61	$3.1E{+}3$	$3.1E{+}10$	$1.5E{+}10$	$1.9E{+}8$
7.5	$4.8E{+}3$	19.84	$3.5E{+}3$	$4.9E{+}10$	$2.4E{+}10$	$2.8E{+}8$
7.75	$5.6E{+}3$	21.12	$4.E{+}3$	$7.7E{+}10$	$3.8E{+}10$	$4.E{+}8$
8	$6.6E{+}3$	22.44	$4.5E{+}3$	$1.2E{+}11$	$6.E{+}10$	$5.8E{+}8$
8.25	$7.6E{+}3$	23.8	$5.1E{+}3$	$1.8E{+}11$	$9.4E{+}10$	$8.3E{+}8$
8.5	$8.8E{+}3$	25.2	$5.8E{+}3$	$2.7E{+}11$	$1.4E{+}11$	$1.2E{+}9$
8.75	$1.E+4$	26.65	$6.5E{+}3$	$4.E{+}11$	$2.2E{+}11$	$1.6E{+}9$

Table 1.8: NPT for Isentropic Flow (continue)

M	**Fn**	$\frac{\rho RT_0}{P}$	$\left(\frac{P_0 A^*}{PA}\right)^2$	$\frac{RT_0}{P^2}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R\rho_0 P}\left(\frac{\dot{m}}{A}\right)^2$	$\frac{1}{R{\rho_0}^2 T}\left(\frac{\dot{m}}{A}\right)^2$
9	$1.2E{+}4$	28.13	$7.2E{+}3$	$5.8E{+}11$	$3.3E{+}11$	$2.3E{+}9$
9.25	$1.3E{+}4$	29.66	$8.E{+}3$	$8.4E{+}11$	$4.9E{+}11$	$3.1E{+}9$
9.5	$1.5E{+}4$	31.23	$8.9E{+}3$	$1.2E{+}12$	$7.2E{+}11$	$4.3E{+}9$
9.75	$1.7E{+}4$	32.85	$9.9E{+}3$	$1.7E{+}12$	$1.1E{+}12$	$5.8E{+}9$
10	$1.9E{+}4$	34.5	$1.1E{+}4$	$2.4E{+}12$	$1.5E{+}12$	$7.7E{+}9$
20	$5.9E{+}5$	$1.4E{+}2$	$1.7E{+}5$	$3.5E{+}16$	$4.2E{+}16$	$2.8E{+}13$
30	$4.4E{+}6$	$3.E{+}2$	$8.6E{+}5$	$1.E{+}19$	$1.8E{+}19$	$3.5E{+}15$
40	$1.8E{+}7$	$5.4E{+}2$	$2.7E{+}6$	$5.5E{+}20$	$1.3E{+}21$	$1.1E{+}17$
50	$5.6E{+}7$	$8.4E{+}2$	$6.6E{+}6$	$1.2E{+}22$	$3.6E{+}22$	$1.6E{+}18$

Chapter 2

Isothermal Nozzle

2.1 Isothermal Nozzle for k=1.2

Table 2.1: Isothermal Nozzle for k=1.2

M	$\frac{\mathbf{T_0}}{\mathbf{T_0}^{\star}}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^{\star}}$	$\frac{\mathbf{A}}{\mathbf{A}^{\star}}$	$\frac{\mathbf{P}}{\mathbf{P}^{\star}}$	$\frac{\mathbf{A\times P}}{\mathbf{A^{*}\times P_0}}$	$\frac{\mathbf{F}}{\mathbf{F}^{*}}$
$1.E{-}6$	0.90909	1.029	$5.5E+5$	1.822	$1.E+6$	$4.5E{+}5$
0.05	0.90932	1.029	10.99	1.819	20	9.118
0.1	0.91	1.029	5.521	1.811	10	4.6
0.2	0.91273	1.028	2.811	1.779	5	2.382
0.25	0.91477	1.028	2.279	1.755	4	1.955
0.3	0.91727	1.028	1.931	1.726	3.333	1.679
0.35	0.92023	1.028	1.688	1.693	2.857	1.49
0.4	0.92364	1.028	1.51	1.655	2.5	1.355
0.45	0.9275	1.027	1.377	1.614	2.222	1.256
0.5	0.93182	1.027	1.275	1.568	2	1.182
0.55	0.93659	1.026	1.196	1.52	1.818	1.126
0.6	0.94182	1.025	1.135	1.468	1.667	1.085
0.65	0.9475	1.023	1.088	1.414	1.538	1.054
0.7	0.95364	1.021	1.052	1.358	1.429	1.031
0.75	0.96023	1.019	1.026	1.3	1.333	1.015
0.8	0.96727	1.016	1.007	1.241	1.25	1.005
0.85	0.97477	1.013	0.99603	1.181	1.176	0.9984
0.9	0.98273	1.01	0.9914	1.121	1.111	0.99596

Table 2.1: Isothermal Nozzle for k=1.2 (continue)

M	$\frac{T_0}{T_0{}^\star}$	$\frac{P_0}{P_0{}^\star}$	$\frac{A}{A^\star}$	$\frac{P}{P^\star}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
0.95	0.99114	1.005	0.99282	1.06	1.053	0.99665
1	1	1	1	1	1	1
1.05	1.009	0.99417	1.013	0.94035	0.95238	1.006
1.1	1.019	0.98754	1.031	0.88161	0.90909	1.013
1.15	1.029	0.98008	1.055	0.82407	0.86957	1.023
1.2	1.04	0.97173	1.085	0.76797	0.83333	1.033
1.25	1.051	0.96245	1.121	0.71355	0.8	1.045
1.3	1.063	0.95221	1.164	0.661	0.76923	1.059
1.35	1.075	0.94097	1.213	0.61049	0.74074	1.073
1.4	1.087	0.9287	1.271	0.56214	0.71429	1.088
1.45	1.1	0.9154	1.336	0.51608	0.68966	1.104
1.5	1.114	0.90103	1.411	0.47237	0.66667	1.121
1.55	1.127	0.88561	1.497	0.43106	0.64516	1.139
1.6	1.142	0.86912	1.594	0.39219	0.625	1.157
1.65	1.157	0.8516	1.704	0.35576	0.60606	1.175
1.7	1.172	0.83305	1.828	0.32174	0.58824	1.195
1.75	1.188	0.81351	1.97	0.29011	0.57143	1.214
1.8	1.204	0.79301	2.13	0.2608	0.55556	1.234
1.85	1.22	0.77161	2.312	0.23375	0.54054	1.255
1.9	1.237	0.74935	2.52	0.20888	0.52632	1.276
1.95	1.255	0.72631	2.756	0.18609	0.51282	1.297
2	1.273	0.70256	3.025	0.1653	0.5	1.318
2.25	1.369	0.57601	5.086	0.087379	0.44444	1.429
2.5	1.477	0.44539	9.334	0.042852	0.4	1.545
2.75	1.597	0.32294	18.65	0.019497	0.36364	1.665
3	1.727	0.21855	40.5	0.00823	0.33333	1.788
3.25	1.869	0.13751	95.47	0.00322	0.30769	1.913
3.5	2.023	0.080193	$2.4E+2$	0.00117	0.28571	2.039
3.75	2.187	0.043242	$6.8E+2$	0.000395	0.26667	2.167
4	2.364	0.02152	$2.E+3$	0.000123	0.25	2.295
4.25	2.551	0.00987	$6.6E+3$	$3.58E{-}5$	0.23529	2.425
4.5	2.75	0.00417	$2.3E+4$	$9.64E{-}6$	0.22222	2.556
4.75	2.96	0.00162	$8.7E+4$	$2.41E{-}6$	0.21053	2.687

Table 2.1: Isothermal Nozzle for k=1.2 (continue)

M	$\frac{T_0}{T_0{}^\star}$	$\frac{P_0}{P_0{}^\star}$	$\frac{A}{A^\star}$	$\frac{P}{P^\star}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
5	3.182	0.000578	$3.6E+5$	0	0	2.818
5.25	3.415	0.00019	$1.6E+6$	0	0	2.95
5.5	3.659	$5.73E{-}5$	$7.6E+6$	0	0	3.083
5.75	3.915	$1.59E{-}5$	$3.9E+7$	0	0	3.215
6	4.182	$4.06E{-}6$	$2.2E+8$	0	0	3.348
6.25	4.46	0	$1.3E+9$	0	0	3.482
6.5	4.75	0	$8.6E+9$	0	0	3.615
6.75	5.051	0	$6.1E{+}10$	0	0	3.749
7	5.364	0	$4.6E{+}11$	0	0	3.883
7.25	5.687	0	$3.8E{+}12$	0	0	4.017
7.5	6.023	0	$3.3E{+}13$	0	0	4.152
7.75	6.369	0	$3.2E{+}14$	0	0	4.286
8	6.727	0	$3.3E{+}15$	0	0	4.42
8.25	7.097	0	$3.6E{+}16$	0	0	4.555
8.5	7.477	0	$4.3E{+}17$	0	0	4.69
8.75	7.869	0	$5.6E{+}18$	0	0	4.825
9	8.273	0	$7.8E{+}19$	0	0	4.96
9.25	8.687	0	$1.2E{+}21$	0	0	5.095
9.5	9.114	0	$1.9E{+}22$	0	0	5.23
9.75	9.551	0	$3.3E{+}23$	0	0	5.365
10	10	0	$6.3E{+}24$	0	0	5.5
20	37.27	0	$4.7E{+}102$	0	0	10.93
30	82.73	0	$6.E{+}232$	0	0	16.38
40	$1.5E{+}2$	0	∞	0	0	21.83
50	$2.3E{+}2$	0	∞	0	0	27.28

Table 2.2: Isothermal Table

M	$\frac{T_0}{T_0{}^\star}$	$\frac{P_0}{P_0{}^\star}$	$\frac{A}{A^\star}$	$\frac{P}{P^\star}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
0.00	0.52828	1.064	$5.0E+5$	2.014	$1.0E{+}6$	$4.2E{+}5$
0.05	0.52921	1.064	9.949	2.010	20.00	8.362
0.1	0.53199	1.064	5.001	2.000	10.00	4.225
0.2	0.54322	1.064	2.553	1.958	5.000	2.200

Table 2.2: Isothermal Table

M	$\frac{T_0}{T_0{}^{\star}}$	$\frac{P_0}{P_0{}^{\star}}$	$\frac{A}{A^{\star}}$	$\frac{P}{P^{\star}}$	$\frac{A \times P}{A^{*} \times P_0}$	$\frac{F}{F^{*}}$
0.3	0.56232	1.063	1.763	1.891	3.333	1.564
0.4	0.58985	1.062	1.389	1.800	2.500	1.275
0.5	0.62665	1.059	1.183	1.690	2.000	1.125
0.6	0.67383	1.055	1.065	1.565	1.667	1.044
0.7	0.73278	1.047	0.99967	1.429	1.429	1.004
0.8	0.80528	1.036	0.97156	1.287	1.250	0.98750
0.9	0.89348	1.021	0.97274	1.142	1.111	0.98796
1.00	1.000	1.000	1.000	1.000	1.000	1.000
1.10	1.128	0.97376	1.053	0.86329	0.90909	1.020
1.20	1.281	0.94147	1.134	0.73492	0.83333	1.047
1.30	1.464	0.90302	1.247	0.61693	0.76923	1.079
1.40	1.681	0.85853	1.399	0.51069	0.71429	1.114
1.50	1.939	0.80844	1.599	0.41686	0.66667	1.153
1.60	2.245	0.75344	1.863	0.33554	0.62500	1.194
1.70	2.608	0.69449	2.209	0.26634	0.58824	1.237
1.80	3.035	0.63276	2.665	0.20846	0.55556	1.281
1.90	3.540	0.56954	3.271	0.16090	0.52632	1.328
2.00	4.134	0.50618	4.083	0.12246	0.50000	1.375
2.50	9.026	0.22881	15.78	0.025349	0.40000	1.625
3.000	19.41	0.071758	90.14	0.00370	0.33333	1.889
3.500	40.29	0.015317	$7.5E+2$	0.000380	0.28571	2.161
4.000	80.21	0.00221	$9.1E+3$	$2.75E{-5}$	0.25000	2.438
4.500	$1.5E+2$	0.000215	$1.6E+5$	$1.41E{-6}$	0.22222	2.718
5.000	$2.8E+2$	$1.41E{-5}$	$4.0E+6$	0.0	0.20000	3.000
5.500	$4.9E+2$	0.0	$1.4E+8$	0.0	0.18182	3.284
6.000	$8.3E+2$	0.0	$7.3E+9$	0.0	0.16667	3.569
6.500	$1.4E+3$	0.0	$5.3E{+}11$	0.0	0.15385	3.856
7.000	$2.2E+3$	0.0	$5.6E{+}13$	0.0	0.14286	4.143
7.500	$3.4E+3$	0.0	$8.3E{+}15$	0.0	0.13333	4.431
8.000	$5.2E+3$	0.0	$1.8E{+}18$	0.0	0.12500	4.719
8.500	$7.7E+3$	0.0	$5.4E{+}20$	0.0	0.11765	5.007
9.000	$1.1E+4$	0.0	$2.3E{+}23$	0.0	0.11111	5.296
9.500	$1.6E+4$	0.0	$1.4E{+}26$	0.0	0.10526	5.586

Table 2.2: Isothermal Table

M	$\frac{T_0}{T_0{}^\star}$	$\frac{P_0}{P_0{}^\star}$	$\frac{A}{A^\star}$	$\frac{P}{P^\star}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
10.00	$2.2E+4$	0.0	$1.2E{+}29$	0.0	0.10000	05.875

2.2 Isothermal Nozzle for k=1.3

Table 2.3: Isothermal Nozzle for K=1.3

M	$\frac{T_0}{T_0{}^\star}$	$\frac{P_0}{P_0{}^\star}$	$\frac{A}{A^\star}$	$\frac{P}{P^\star}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
$1.0E{-}6$	0.86957	1.045	$5.2E+5$	1.916	$1.E+6$	$4.3E{+}5$
0.05	0.86989	1.045	10.46	1.912	20	8.724
0.1	0.87087	1.045	5.255	1.903	10	4.404
0.2	0.87478	1.045	2.679	1.866	5	2.287
0.25	0.87772	1.045	2.175	1.839	4	1.88
0.3	0.8813	1.045	1.845	1.807	3.333	1.619
0.35	0.88554	1.045	1.615	1.769	2.857	1.44
0.4	0.89043	1.044	1.448	1.726	2.5	1.313
0.45	0.89598	1.043	1.323	1.679	2.222	1.221
0.5	0.90217	1.042	1.228	1.628	2	1.152
0.55	0.90902	1.041	1.155	1.574	1.818	1.101
0.6	0.91652	1.039	1.099	1.516	1.667	1.064
0.65	0.92467	1.037	1.057	1.456	1.538	1.036
0.7	0.93348	1.034	1.025	1.393	1.429	1.017
0.75	0.94293	1.03	1.003	1.329	1.333	1.004
0.8	0.95304	1.026	0.9892	1.264	1.25	0.99565
0.85	0.9638	1.021	0.9823	1.198	1.176	0.99194
0.9	0.97522	1.015	0.98202	1.131	1.111	0.99179
0.95	0.98728	1.008	0.98799	1.065	1.053	0.99462
1	1	1	1	1	1	1
1.05	1.013	0.99097	1.018	0.93555	0.95238	1.008
1.1	1.027	0.98079	1.042	0.87241	0.90909	1.017
1.15	1.042	0.96941	1.072	0.81089	0.86957	1.028
1.2	1.057	0.95678	1.109	0.75126	0.83333	1.041
1.25	1.073	0.94288	1.153	0.69376	0.8	1.054
1.3	1.09	0.92768	1.205	0.63859	0.76923	1.069

Table 2.3: Isothermal Nozzle for K=1.3 (continue)

M	$\frac{T_0}{{T_0}^{\star}}$	$\frac{P_0}{{P_0}^{\star}}$	$\frac{A}{A^{\star}}$	$\frac{P}{P^{\star}}$	$\frac{A\times P}{A^{*}\times P_0}$	$\frac{F}{F^{*}}$
1.35	1.107	0.91118	1.264	0.58589	0.74074	1.085
1.4	1.125	0.89336	1.333	0.5358	0.71429	1.102
1.45	1.144	0.87424	1.412	0.4884	0.68966	1.119
1.5	1.163	0.85386	1.502	0.44375	0.66667	1.138
1.55	1.183	0.83224	1.605	0.40187	0.64516	1.157
1.6	1.203	0.80945	1.723	0.36277	0.625	1.176
1.65	1.225	0.78555	1.857	0.3264	0.60606	1.196
1.7	1.247	0.76062	2.009	0.29273	0.58824	1.217
1.75	1.269	0.73475	2.184	0.26168	0.57143	1.238
1.8	1.292	0.70804	2.383	0.23317	0.55556	1.259
1.85	1.316	0.6806	2.61	0.20709	0.54054	1.281
1.9	1.34	0.65256	2.871	0.18332	0.52632	1.303
1.95	1.366	0.62403	3.17	0.16176	0.51282	1.325
2	1.391	0.59514	3.514	0.14227	0.5	1.348
2.25	1.53	0.45018	6.232	0.071317	0.44444	1.465
2.5	1.685	0.31598	12.14	0.032959	0.4	1.587
2.75	1.856	0.20478	25.89	0.014043	0.36364	1.712
3	2.043	0.12207	60.42	0.00552	0.33333	1.841
3.25	2.247	0.066748	$1.5E+2$	0.002	0.30769	1.971
3.5	2.467	0.033413	$4.3E+2$	0.000667	0.28571	2.102
3.75	2.704	0.015292	$1.3E+3$	0.000205	0.26667	2.236
4	2.957	0.00639	$4.3E+3$	$5.83E-5$	0.25	2.37
4.25	3.226	0.00244	$1.5E+4$	$1.53E-5$	0.23529	2.504
4.5	3.511	0.00085	$6.E+4$	$3.68E-6$	0.22222	2.64
4.75	3.813	0.00027	$2.6E+5$	0	0	2.776
5	4.13	$7.84E-5$	$1.2E+6$	0	0	2.913
5.25	4.465	$2.08E-5$	$6.E+6$	0	0	3.05
5.5	4.815	$5.02E-6$	$3.3E+7$	0	0	3.188
5.75	5.182	0	$2.E+8$	0	0	3.326
6	5.565	0	$1.3E+9$	0	0	3.464
6.25	5.965	0	$8.9E+9$	0	0	3.602
6.5	6.38	0	$6.8E+10$	0	0	3.741
6.75	6.813	0	$5.6E+11$	0	0	3.88

Table 2.3: Isothermal Nozzle for K=1.3 (continue)

M	$\frac{T_0}{{T_0}^{\star}}$	$\frac{P_0}{{P_0}^{\star}}$	$\frac{A}{A^{\star}}$	$\frac{P}{P^{\star}}$	$\frac{A\times P}{A^{*}\times P_0}$	$\frac{F}{F^{*}}$
7	7.261	0	$5.1E{+}12$	0	0	4.019
7.25	7.726	0	$5.E+13$	0	0	4.158
7.5	8.207	0	$5.3E{+}14$	0	0	4.297
7.75	8.704	0	$6.1E{+}15$	0	0	4.437
8	9.217	0	$7.6E{+}16$	0	0	4.576
8.25	9.747	0	$1.E+18$	0	0	4.716
8.5	10.29	0	$1.5E{+}19$	0	0	4.855
8.75	10.86	0	$2.4E{+}20$	0	0	4.995
9	11.43	0	$4.3E{+}21$	0	0	5.135
9.25	12.03	0	$8.E+22$	0	0	5.275
9.5	12.64	0	$1.6E{+}24$	0	0	5.415
9.75	13.27	0	$3.7E{+}25$	0	0	5.555
10	13.91	0	$8.8E{+}26$	0	0	5.696
20	53.04	0	$2.2E{+}111$	0	0	11.33
30	$1.2E{+}2$	0	$2.E{+}252$	0	0	16.97
40	$2.1E{+}2$	0	∞	0	0	22.62
50	$3.3E{+}2$	0	∞	0	0	28.27

2.3 Isothermal Nozzle for k=1.4

Table 2.4: Isothermal Nozzle for k=1.4

M	$\frac{T_0}{{T_0}^{\star}}$	$\frac{P_0}{{P_0}^{\star}}$	$\frac{A}{A^{\star}}$	$\frac{P}{P^{\star}}$	$\frac{A\times P}{A^{*}\times P_0}$	$\frac{F}{F^{*}}$
$1.0E{-}6$	0.83333	1.064	$5.E+5$	2.014	$1.E+6$	$4.2E{+}5$
0.05	0.83375	1.064	9.949	2.01	20	8.362
0.1	0.835	1.064	5.001	2	10	4.225
0.2	0.84	1.064	2.553	1.958	5	2.2
0.25	0.84375	1.064	2.075	1.928	4	1.812
0.3	0.84833	1.063	1.763	1.891	3.333	1.564
0.35	0.85375	1.063	1.546	1.848	2.857	1.395
0.4	0.86	1.062	1.389	1.8	2.5	1.275
0.45	0.86708	1.061	1.272	1.748	2.222	1.188

Table 2.4: Isothermal Nozzle for k=1.4 (continue)

M	$\frac{T_0}{T_0{}^\star}$	$\frac{P_0}{P_0{}^\star}$	$\frac{A}{A^\star}$	$\frac{P}{P^\star}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
0.5	0.875	1.059	1.183	1.69	2	1.125
0.55	0.88375	1.057	1.116	1.629	1.818	1.078
0.6	0.89333	1.055	1.065	1.565	1.667	1.044
0.65	0.90375	1.051	1.027	1.498	1.538	1.02
0.7	0.915	1.047	0.99967	1.429	1.429	1.004
0.75	0.92708	1.042	0.9816	1.358	1.333	0.99306
0.8	0.94	1.036	0.97156	1.287	1.25	0.9875
0.85	0.95375	1.029	0.96877	1.214	1.176	0.98603
0.9	0.96833	1.021	0.97274	1.142	1.111	0.98796
0.95	0.98375	1.011	0.98319	1.071	1.053	0.99276
1	1	1	1	1	1	1
1.05	1.017	0.98761	1.023	0.93076	0.95238	1.009
1.1	1.035	0.97376	1.053	0.86329	0.90909	1.02
1.15	1.054	0.95838	1.09	0.79792	0.86957	1.033
1.2	1.073	0.94147	1.134	0.73492	0.83333	1.047
1.25	1.094	0.92302	1.186	0.67452	0.8	1.063
1.3	1.115	0.90302	1.247	0.61693	0.76923	1.079
1.35	1.137	0.88151	1.317	0.56228	0.74074	1.096
1.4	1.16	0.85853	1.399	0.51069	0.71429	1.114
1.45	1.184	0.83415	1.492	0.4622	0.68966	1.133
1.5	1.208	0.80844	1.599	0.41686	0.66667	1.153
1.55	1.234	0.7815	1.722	0.37465	0.64516	1.173
1.6	1.26	0.75344	1.863	0.33554	0.625	1.194
1.65	1.287	0.72439	2.024	0.29947	0.60606	1.215
1.7	1.315	0.69449	2.209	0.26634	0.58824	1.237
1.75	1.344	0.6639	2.421	0.23604	0.57143	1.259
1.8	1.373	0.63276	2.665	0.20846	0.55556	1.281
1.85	1.404	0.60126	2.946	0.18346	0.54054	1.304
1.9	1.435	0.56954	3.271	0.1609	0.52632	1.328
1.95	1.467	0.53779	3.647	0.14061	0.51282	1.351
2	1.5	0.50618	4.083	0.12246	0.5	1.375
2.25	1.677	0.35556	7.636	0.058207	0.44444	1.498
2.5	1.875	0.22881	15.78	0.025349	0.4	1.625

Table 2.4: Isothermal Nozzle for k=1.4 (continue)

M	$\frac{T_0}{T_0{}^{\star}}$	$\frac{P_0}{P_0{}^{\star}}$	$\frac{A}{A^{\star}}$	$\frac{P}{P^{\star}}$	$\frac{A\times P}{A^{*}\times P_0}$	$\frac{F}{F^{*}}$
2.75	2.094	0.13434	35.95	0.010115	0.36364	1.756
3	2.333	0.071758	90.14	0.0037	0.33333	1.889
3.25	2.594	0.034809	$2.5E+2$	0.00124	0.30769	2.024
3.5	2.875	0.015317	$7.5E+2$	0.00038	0.28571	2.161
3.75	3.177	0.00611	$2.5E+3$	0.000107	0.26667	2.299
4	3.5	0.00221	$9.1E+3$	$2.75E{-5}$	0.25	2.438
4.25	3.844	0.000724	$3.6E+4$	$6.5E-6$	0.23529	2.577
4.5	4.208	0.000215	$1.6E+5$	$1.41E{-6}$	0.22222	2.718
4.75	4.594	$5.79E{-5}$	$7.6E+5$	0	0	2.859
5	5	$1.41E{-5}$	$4.E+6$	0	0	3
5.25	5.427	$3.13E{-6}$	$2.3E+7$	0	0	3.142
5.5	5.875	0	$1.4E+8$	0	0	3.284
5.75	6.344	0	$9.7E+8$	0	0	3.427
6	6.833	0	$7.3E+9$	0	0	3.569
6.25	7.344	0	$6.E+10$	0	0	3.712
6.5	7.875	0	$5.3E{+11}$	0	0	3.856
6.75	8.427	0	$5.2E{+12}$	0	0	3.999
7	9	0	$5.6E{+13}$	0	0	4.143
7.25	9.594	0	$6.5E{+14}$	0	0	4.287
7.5	10.21	0	$8.3E{+15}$	0	0	4.431
7.75	10.84	0	$1.2E{+17}$	0	0	4.575
8	11.5	0	$1.8E{+18}$	0	0	4.719
8.25	12.18	0	$3.E+19$	0	0	4.863
8.5	12.87	0	$5.4E{+20}$	0	0	5.007
8.75	13.59	0	$1.1E{+22}$	0	0	5.152
9	14.33	0	$2.3E{+23}$	0	0	5.296
9.25	15.09	0	$5.5E{+24}$	0	0	5.441
9.5	15.87	0	$1.4E{+26}$	0	0	5.586
9.75	16.68	0	$4.E+27$	0	0	5.73
10	17.5	0	$1.2E{+29}$	0	0	5.875
20	67.5	0	$9.9E{+119}$	0	0	11.69
30	$1.5E{+2}$	0	$6.7E{+271}$	0	0	17.51
40	$2.7E{+2}$	0	∞	0	0	23.34

Table 2.4: Isothermal Nozzle for k=1.4 (continue)

M	$\frac{T_0}{T_0{}^\star}$	$\frac{P_0}{P_0{}^\star}$	$\frac{A}{A^\star}$	$\frac{P}{P^\star}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
50	$4.2E{+}2$	0	∞	0	0	29.18

2.4 Isothermal Nozzle for k=1.67

Table 2.5: Isothermal Nozzle for k=1.67

M	$\frac{T_0}{T_0{}^\star}$	$\frac{P_0}{P_0{}^\star}$	$\frac{A}{A^\star}$	$\frac{P}{P^\star}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
$1.E{-}6$	0.74906	1.122	$4.3E+5$	2.305	$1.E+6$	$3.7E{+}5$
0.05	0.74969	1.122	8.696	2.3	20	7.522
0.1	0.75157	1.122	4.375	2.286	10	3.808
0.2	0.7591	1.121	2.243	2.229	5	1.998
0.25	0.76475	1.121	1.828	2.188	4	1.654
0.3	0.77165	1.12	1.559	2.138	3.333	1.436
0.35	0.7798	1.119	1.373	2.081	2.857	1.289
0.4	0.78921	1.118	1.24	2.017	2.5	1.187
0.45	0.79988	1.116	1.142	1.946	2.222	1.114
0.5	0.8118	1.112	1.069	1.871	2	1.062
0.55	0.82497	1.108	1.016	1.79	1.818	1.025
0.6	0.8394	1.103	0.9767	1.706	1.667	0.9995
0.65	0.85508	1.096	0.94987	1.62	1.538	0.98276
0.7	0.87202	1.088	0.93316	1.531	1.429	0.97287
0.75	0.89022	1.078	0.92531	1.441	1.333	0.96848
0.8	0.90966	1.067	0.92547	1.351	1.25	0.96854
0.85	0.93037	1.053	0.93315	1.261	1.176	0.97227
0.9	0.95232	1.038	0.94811	1.172	1.111	0.97907
0.95	0.97553	1.02	0.97033	1.085	1.053	0.98844
1	1	1	1	1	1	1
1.05	1.026	0.97796	1.037	0.91797	0.95238	1.013
1.1	1.053	0.95376	1.083	0.83916	0.90909	1.028
1.15	1.081	0.92745	1.138	0.76392	0.86957	1.045
1.2	1.11	0.89911	1.203	0.69253	0.83333	1.063
1.25	1.141	0.86886	1.28	0.6252	0.8	1.081

Table 2.5: Isothermal Nozzle for k=1.67 (continue)

M	$\frac{T_0}{T_0{}^\star}$	$\frac{P_0}{P_0{}^\star}$	$\frac{A}{A^\star}$	$\frac{P}{P^\star}$	$\frac{A\times P}{A^*\times P_0}$	$\frac{F}{F^*}$
1.3	1.173	0.83684	1.369	0.56206	0.76923	1.101
1.35	1.206	0.80324	1.472	0.50319	0.74074	1.122
1.4	1.241	0.76826	1.592	0.44861	0.71429	1.143
1.45	1.277	0.73213	1.732	0.39828	0.68966	1.165
1.5	1.314	0.69508	1.893	0.35213	0.66667	1.188
1.55	1.352	0.65738	2.081	0.31003	0.64516	1.211
1.6	1.391	0.61929	2.299	0.27182	0.625	1.235
1.65	1.432	0.58108	2.554	0.23733	0.60606	1.259
1.7	1.474	0.543	2.851	0.20636	0.58824	1.284
1.75	1.518	0.50533	3.198	0.17867	0.57143	1.309
1.8	1.562	0.4683	3.606	0.15406	0.55556	1.334
1.85	1.608	0.43213	4.086	0.13229	0.54054	1.36
1.9	1.655	0.39705	4.653	0.11312	0.52632	1.386
1.95	1.703	0.36323	5.324	0.096319	0.51282	1.412
2	1.753	0.33083	6.122	0.081676	0.5	1.438
2.25	2.019	0.1939	13.21	0.033635	0.44444	1.574
2.5	2.317	0.10138	32.06	0.012478	0.4	1.713
2.75	2.647	0.047189	87.19	0.00417	0.36364	1.856
3	3.007	0.019537	$2.7E+2$	0.00126	0.33333	2.001
3.25	3.4	0.00719	$9.E+2$	0.000341	0.30769	2.148
3.5	3.823	0.00236	$3.4E+3$	$8.32E{-5}$	0.28571	2.296
3.75	4.278	0.000686	$1.5E+4$	$1.83E{-5}$	0.26667	2.445
4	4.764	0.000178	$6.9E+4$	$3.63E{-6}$	0.25	2.596
4.25	5.282	$4.11E{-5}$	$3.6E+5$	0	0	2.746
4.5	5.831	$8.47E{-6}$	$2.1E+6$	0	0	2.898
4.75	6.411	$1.56E{-6}$	$1.4E+7$	0	0	3.05
5	7.022	0	$1.E+8$	0	0	3.202
5.25	7.665	0	$8.2E+8$	0	0	3.355
5.5	8.34	0	$7.4E+9$	0	0	3.508
5.75	9.046	0	$7.4E{+10}$	0	0	3.662
6	9.783	0	$8.2E{+11}$	0	0	3.815
6.25	10.55	0	$1.E+13$	0	0	3.969
6.5	11.35	0	$1.4E{+14}$	0	0	4.123

Table 2.5: Isothermal Nozzle for k=1.67 (continue)

M	$\frac{T_0}{{T_0}^{\star}}$	$\frac{P_0}{{P_0}^{\star}}$	$\frac{A}{A^{\star}}$	$\frac{P}{P^{\star}}$	$\frac{A\times P}{A^{*}\times P_0}$	$\frac{F}{F^{*}}$
6.75	12.18	0	$2.1E{+}15$	0	0	4.277
7	13.04	0	$3.6E{+}16$	0	0	4.432
7.25	13.94	0	$6.9E{+}17$	0	0	4.586
7.5	14.86	0	$1.4E{+}19$	0	0	4.741
7.75	15.82	0	$3.4E{+}20$	0	0	4.896
8	16.81	0	$8.8E{+}21$	0	0	5.051
8.25	17.83	0	$2.5E{+}23$	0	0	5.206
8.5	18.88	0	$8.1E{+}24$	0	0	5.361
8.75	19.96	0	$2.9E{+}26$	0	0	5.516
9	21.07	0	$1.1E{+}28$	0	0	5.671
9.25	22.22	0	$5.E+29$	0	0	5.826
9.5	23.4	0	$2.4E{+}31$	0	0	5.981
9.75	24.6	0	$1.3E{+}33$	0	0	6.137
10	25.84	0	$8.E+34$	0	0	6.292
20	$1.E{+}2$	0	$2.5E{+}143$	0	0	12.53
30	$2.3E{+}2$	0	∞	0	0	18.78
40	$4.E{+}2$	0	∞	0	0	25.03
50	$6.3E{+}2$	0	∞	0	0	31.28

Chapter 3

Normal Shock

3.1 Normal Shock Standard tables

3.1.1 Normal Shock Standard Table for k=1.2

Table 3.1: Normal Shock Standard Table for k=1.2

$\mathbf{M_x}$	$\mathbf{M_y}$	$\frac{\mathbf{T_y}}{\mathbf{T_x}}$	$\frac{\rho_y}{\rho_x}$	$\frac{\mathbf{P_y}}{\mathbf{P_x}}$	$\frac{\mathbf{P_{0y}}}{\mathbf{P_{0x}}}$
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0100	0.99012	1.0036	1.0182	1.0219	1.00000
1.0200	0.98046	1.0072	1.0366	1.0441	0.99999
1.0300	0.97103	1.0108	1.0551	1.0664	0.99997
1.0400	0.96181	1.0143	1.0736	1.0890	0.99992
1.0500	0.95279	1.0178	1.0923	1.1118	0.99985
1.0600	0.94397	1.0213	1.1111	1.1348	0.99974
1.0700	0.93535	1.0248	1.1300	1.1581	0.99960
1.0800	0.92691	1.0283	1.1490	1.1815	0.99941
1.0900	0.91865	1.0317	1.1681	1.2052	0.99917
1.1000	0.91057	1.0352	1.1873	1.2291	0.99888
1.2000	0.83827	1.0689	1.3846	1.4800	0.99235
1.2500	0.80710	1.0855	1.4865	1.6136	0.98614
1.3000	0.77867	1.1022	1.5902	1.7527	0.97773
1.3500	0.75265	1.1189	1.6957	1.8973	0.96707
1.4000	0.72875	1.1357	1.8027	2.0473	0.95417

Table 3.1: Normal Shock Standard Table for k=1.2 (continue)

M_x	M_y	$\frac{T_y}{T_x}$	$\frac{\rho_y}{\rho_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0y}}{P_{0x}}$
1.4500	0.70674	1.1527	1.9110	2.2027	0.93911
1.5000	0.68641	1.1699	2.0204	2.3636	0.92200
1.5500	0.66757	1.1873	2.1308	2.5300	0.90298
1.6000	0.65009	1.2051	2.2420	2.7018	0.88222
1.6500	0.63381	1.2231	2.3539	2.8791	0.85991
1.7000	0.61864	1.2415	2.4663	3.0618	0.83624
1.7500	0.60447	1.2602	2.5789	3.2500	0.81141
1.8000	0.59121	1.2793	2.6918	3.4436	0.78562
1.8500	0.57877	1.2987	2.8048	3.6427	0.75907
1.9000	0.56710	1.3186	2.9177	3.8473	0.73196
1.9500	0.55612	1.3388	3.0304	4.0573	0.70446
2.0000	0.54578	1.3595	3.1429	4.2727	0.67674
2.1000	0.52682	1.4021	3.3664	4.7200	0.62129
2.2000	0.50989	1.4464	3.5876	5.1891	0.56672
2.3000	0.49469	1.4925	3.8058	5.6800	0.51393
2.4000	0.48100	1.5404	4.0203	6.1927	0.46360
2.5000	0.46861	1.5901	4.2308	6.7273	0.41622
2.6000	0.45737	1.6417	4.4368	7.2836	0.37209
2.7000	0.44714	1.6951	4.6379	7.8618	0.33139
2.8000	0.43779	1.7505	4.8341	8.4618	0.29415
2.9000	0.42924	1.8077	5.0250	9.0836	0.26032
3.0000	0.42139	1.8669	5.2105	9.7273	0.22979
3.5000	0.39038	2.1916	6.0562	13.2727	0.11978
4.0000	0.36895	2.5651	6.7692	17.3636	0.06096
4.5000	0.35355	2.9877	7.3636	22.0000	0.03093
5.0000	0.34214	3.4595	7.8571	27.1818	0.01586
5.5000	0.33345	3.9807	8.2671	32.9091	0.00827
6	0.32669	4.551	8.609	39.18	0.00441
6.5	0.32134	5.172	8.895	46	0.0024
7	0.31703	5.841	9.136	53.36	0.00134
7.5	0.31352	6.561	9.34	61.27	0.000768
8	0.31061	7.329	9.514	69.73	0.00045

Table 3.1: Normal Shock Standard Table for k=1.2 (continue)

M_x	M_y	$\frac{T_y}{T_x}$	$\frac{\rho_y}{\rho_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0y}}{P_{0x}}$
8.5	0.30818	8.148	9.663	78.73	0.000269
9	0.30613	9.016	9.791	88.27	0.000164
9.5	0.30439	9.933	9.903	98.36	0.000102
10	0.30289	10.9	10	$1.1E{+}2$	$6.5E-5$
20	0.29229	40.65	10.73	$4.4E{+}2$	0
25	0.29099	62.97	10.83	$6.8E{+}2$	0
30	0.29029	90.24	10.88	$9.8E{+}2$	0
35	0.28986	$1.2E{+}2$	10.91	$1.3E{+}3$	0
40	0.28958	$1.6E{+}2$	10.93	$1.7E{+}3$	0
45	0.28939	$2.E+2$	10.95	$2.2E{+}3$	0
50	0.28926	$2.5E{+}2$	10.96	$2.7E{+}3$	0
55	0.28916	$3.E+2$	10.96	$3.3E{+}3$	0
60	0.28908	$3.6E{+}2$	10.97	$3.9E{+}3$	0
65	0.28902	$4.2E{+}2$	10.97	$4.6E{+}3$	0
70	0.28897	$4.9E{+}2$	10.98	$5.3E{+}3$	0

3.1.2 Normal Shock Standard Table for k=1.3

Table 3.2: Standard Normal Shock for k=1.3

M_x	M_y	$\frac{T_y}{T_x}$	$\frac{\rho_y}{\rho_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0y}}{P_{0x}}$
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0100	0.99012	1.0052	1.0174	1.0227	1.00000
1.0200	0.98049	1.0104	1.0349	1.0457	0.99999
1.0300	0.97109	1.0155	1.0525	1.0688	0.99997
1.0400	0.96192	1.0206	1.0702	1.0922	0.99992
1.0500	0.95297	1.0257	1.0880	1.1159	0.99985
1.0600	0.94422	1.0307	1.1058	1.1397	0.99975
1.0700	0.93568	1.0357	1.1237	1.1638	0.99960
1.0800	0.92733	1.0407	1.1416	1.1881	0.99942
1.0900	0.91918	1.0457	1.1596	1.2126	0.99919
1.1000	0.91120	1.0506	1.1777	1.2374	0.99891

Table 3.2: Standard Normal Shock for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\frac{\mathbf{T_y}}{\mathbf{T_x}}$	$\frac{\rho_y}{\rho_x}$	$\frac{\mathbf{P_y}}{\mathbf{P_x}}$	$\frac{\mathbf{P_{0y}}}{\mathbf{P_{0x}}}$
1.2000	0.84033	1.0995	1.3618	1.4974	0.99258
1.2500	0.81003	1.1238	1.4557	1.6359	0.98661
1.3000	0.78253	1.1480	1.5505	1.7800	0.97858
1.3500	0.75749	1.1725	1.6459	1.9298	0.96845
1.4000	0.73459	1.1971	1.7419	2.0852	0.95627
1.4500	0.71358	1.2220	1.8382	2.2463	0.94211
1.5000	0.69425	1.2473	1.9346	2.4130	0.92610
1.5500	0.67642	1.2730	2.0310	2.5854	0.90838
1.6000	0.65992	1.2991	2.1272	2.7635	0.88911
1.6500	0.64463	1.3257	2.2230	2.9472	0.86847
1.7000	0.63041	1.3529	2.3185	3.1365	0.84664
1.7500	0.61718	1.3805	2.4133	3.3315	0.82380
1.8000	0.60484	1.4087	2.5074	3.5322	0.80014
1.8500	0.59330	1.4375	2.6007	3.7385	0.77582
1.9000	0.58251	1.4668	2.6932	3.9504	0.75102
1.9500	0.57238	1.4968	2.7846	4.1680	0.72589
2.0000	0.56288	1.5274	2.8750	4.3913	0.70057
2.1000	0.54553	1.5905	3.0524	4.8548	0.64992
2.2000	0.53011	1.6562	3.2248	5.3409	0.59998
2.3000	0.51635	1.7245	3.3920	5.8496	0.55150
2.4000	0.50400	1.7956	3.5536	6.3809	0.50504
2.5000	0.49290	1.8694	3.7097	6.9348	0.46098
2.6000	0.48286	1.9459	3.8600	7.5113	0.41958
2.7000	0.47377	2.0253	4.0045	8.1104	0.38099
2.8000	0.46550	2.1075	4.1434	8.7322	0.34525
2.9000	0.45796	2.1925	4.2766	9.3765	0.31233
3.0000	0.45107	2.2804	4.4043	10.0435	0.28216
3.5000	0.42411	2.7630	4.9648	13.7174	0.16775
4.0000	0.40577	3.3181	5.4118	17.9565	0.09933
4.5000	0.39275	3.9462	5.7678	22.7609	0.05939
5.0000	0.38319	4.6476	6.0526	28.1304	0.03613
5.5000	0.37597	5.4225	6.2822	34.0652	0.02243
6.0000	0.37039	6.2710	6.4687	40.5652	0.01422

Table 3.2: Standard Normal Shock for k=1.3 (continue)

M_x	M_y	$\frac{T_y}{T_x}$	$\frac{\rho_y}{\rho_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0_y}}{P_{0_x}}$
6.5000	0.36600	7.1930	6.6218	47.6304	0.00922
7	0.36248	8.189	6.749	55.26	0.0061
7.5	0.35962	9.258	6.854	63.46	0.00411
8	0.35726	10.4	6.943	72.22	0.00283
8.5	0.35529	11.62	7.019	81.54	0.00198
9	0.35364	12.91	7.084	91.43	0.0014
9.5	0.35223	14.27	7.139	$1.E+2$	0.00101
10	0.35103	15.71	7.187	$1.1E+2$	0.00074
20	0.34255	59.94	7.541	$4.5E+2$	$8.95E-6$
25	0.34152	93.12	7.586	$7.1E+2$	$2.07E-6$
30	0.34096	$1.3E+2$	7.61	$1.E+3$	0
35	0.34062	$1.8E+2$	7.625	$1.4E+3$	0
40	0.3404	$2.4E+2$	7.635	$1.8E+3$	0
45	0.34025	$3.E+2$	7.642	$2.3E+3$	0
50	0.34014	$3.7E+2$	7.646	$2.8E+3$	0
55	0.34006	$4.5E+2$	7.65	$3.4E+3$	0
60	0.34	$5.3E+2$	7.652	$4.1E+3$	0
65	0.33996	$6.2E+2$	7.655	$4.8E+3$	0
70	0.33992	$7.2E+2$	7.656	$5.5E+3$	0

3.1.3 Normal Shock Standard Table for k=1.4

Table 3.3: Standard Shock Standard Table for k=1.4

M_x	M_y	$\frac{T_y}{T_x}$	$\frac{\rho_y}{\rho_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0_y}}{P_{0_x}}$
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0100	0.99013	1.0066	1.0167	1.0235	1.00000
1.0200	0.98052	1.0132	1.0334	1.0471	0.99999
1.0300	0.97115	1.0198	1.0502	1.0711	0.99997
1.0400	0.96203	1.0263	1.0671	1.0952	0.99992
1.0500	0.95313	1.0328	1.0840	1.1196	0.99985
1.0600	0.94445	1.0393	1.1009	1.1442	0.99975
1.0700	0.93598	1.0458	1.1179	1.1691	0.99961

Table 3.3: Normal Shock Standard Table for k=1.4 (continue)

M_x	M_y	$\frac{T_y}{T_x}$	$\frac{\rho_y}{\rho_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0_y}}{P_{0_x}}$
1.0800	0.92771	1.0522	1.1349	1.1941	0.99943
1.0900	0.91965	1.0586	1.1520	1.2195	0.99920
1.1000	0.91177	1.0649	1.1691	1.2450	0.99893
1.2000	0.84217	1.1280	1.3416	1.5133	0.99280
1.2500	0.81264	1.1594	1.4286	1.6562	0.98706
1.3000	0.78596	1.1909	1.5157	1.8050	0.97937
1.3500	0.76175	1.2226	1.6028	1.9596	0.96974
1.4000	0.73971	1.2547	1.6897	2.1200	0.95819
1.4500	0.71956	1.2872	1.7761	2.2863	0.94484
1.5000	0.70109	1.3202	1.8621	2.4583	0.92979
1.5500	0.68410	1.3538	1.9473	2.6363	0.91319
1.6000	0.66844	1.3880	2.0317	2.8200	0.89520
1.6500	0.65396	1.4228	2.1152	3.0096	0.87599
1.7000	0.64054	1.4583	2.1977	3.2050	0.85572
1.7500	0.62809	1.4946	2.2791	3.4063	0.83457
1.8000	0.61650	1.5316	2.3592	3.6133	0.81268
1.8500	0.60570	1.5693	2.4381	3.8263	0.79023
1.9000	0.59562	1.6079	2.5157	4.0450	0.76736
1.9500	0.58618	1.6473	2.5919	4.2696	0.74420
2.0000	0.57735	1.6875	2.6667	4.5000	0.72087
2.1000	0.56128	1.7705	2.8119	4.9783	0.67420
2.2000	0.54706	1.8569	2.9512	5.4800	0.62814
2.3000	0.53441	1.9468	3.0845	6.0050	0.58329
2.4000	0.52312	2.0403	3.2119	6.5533	0.54014
2.5000	0.51299	2.1375	3.3333	7.1250	0.49901
2.6000	0.50387	2.2383	3.4490	7.7200	0.46012
2.7000	0.49563	2.3429	3.5590	8.3383	0.42359
2.8000	0.48817	2.4512	3.6636	8.9800	0.38946
2.9000	0.48138	2.5632	3.7629	9.6450	0.35773
3.0000	0.47519	2.6790	3.8571	10.3333	0.32834
3.5000	0.45115	3.3151	4.2609	14.1250	0.21295
4.0000	0.43496	4.0469	4.5714	18.5000	0.13876

Table 3.3: Normal Shock Standard Table for k=1.4 (continue)

M_x	M_y	$\frac{T_y}{T_x}$	$\frac{\rho_y}{\rho_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0_y}}{P_{0_x}}$
4.5000	0.42355	4.8751	4.8119	23.4583	0.09170
5.0000	0.41523	5.8000	5.0000	29.0000	0.06172
5.5000	0.40897	6.8218	5.1489	35.1250	0.04236
6.0000	0.40416	7.9406	5.2683	41.8333	0.02965
6.5000	0.40038	9.1564	5.3651	49.1250	0.02115
7.0000	0.39736	10.4694	5.4444	57.0000	0.01535
7.5000	0.39491	11.8795	5.5102	65.4583	0.01133
8.0000	0.39289	13.3867	5.5652	74.5000	0.00849
8.5	0.39121	14.99	5.612	84.12	0.00645
9	0.3898	16.69	5.651	94.33	0.00496
9.5	0.3886	18.49	5.685	$1.1E{+}2$	0.00387
10	0.38758	20.39	5.714	$1.2E{+}2$	0.00304
20	0.38039	78.72	5.926	$4.7E{+}2$	0.000108
25	0.37952	$1.2E{+}2$	5.952	$7.3E{+}2$	$3.59E{-}5$
30	0.37904	$1.8E{+}2$	5.967	$1.E+3$	$1.45E{-}5$
35	0.37876	$2.4E{+}2$	5.976	$1.4E{+}3$	$6.76E{-}6$
40	0.37857	$3.1E{+}2$	5.981	$1.9E{+}3$	$3.48E{-}6$
45	0.37844	$3.9E{+}2$	5.985	$2.4E{+}3$	$1.93E{-}6$
50	0.37835	$4.9E{+}2$	5.988	$2.9E{+}3$	0
55	0.37829	$5.9E{+}2$	5.99	$3.5E{+}3$	0
60	0.37823	$7.E+2$	5.992	$4.2E{+}3$	0
65	0.37819	$8.2E{+}2$	5.993	$4.9E{+}3$	0
70	0.37816	$9.5E{+}2$	5.994	$5.7E{+}3$	0

3.1.4 Normal shock Standard Table for k=1.67

Table 3.4: Standard Normal Shock Table k=1.67

M_x	M_y	$\frac{T_y}{T_x}$	$\frac{\rho_y}{\rho_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0_y}}{P_{0_x}}$
1.0000	1.00000	1.0000	1.0000	1.0000	1.0000
1.0100	0.99015	1.0100	1.0150	1.0251	1.00000
1.0200	0.98058	1.0200	1.0300	1.0505	0.99999

Table 3.4: Standard Normal Shock Table k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\frac{\mathbf{T_y}}{\mathbf{T_x}}$	$\frac{\rho_y}{\rho_x}$	$\frac{\mathbf{P_y}}{\mathbf{P_x}}$	$\frac{\mathbf{P_{0y}}}{\mathbf{P_{0x}}}$
1.0300	0.97129	1.0299	1.0449	1.0762	0.99997
1.0400	0.96227	1.0398	1.0599	1.1021	0.99993
1.0500	0.95349	1.0497	1.0749	1.1282	0.99986
1.0600	0.94496	1.0595	1.0898	1.1546	0.99976
1.0700	0.93666	1.0693	1.1047	1.1813	0.99963
1.0800	0.92858	1.0790	1.1196	1.2082	0.99946
1.0900	0.92072	1.0888	1.1345	1.2353	0.99925
1.1000	0.91307	1.0985	1.1494	1.2627	0.99899
1.2000	0.84629	1.1956	1.2968	1.5504	0.99335
1.2500	0.81843	1.2442	1.3692	1.7037	0.98816
1.3000	0.79351	1.2933	1.4406	1.8631	0.98130
1.3500	0.77111	1.3430	1.5107	2.0289	0.97277
1.4000	0.75088	1.3934	1.5795	2.2009	0.96266
1.4500	0.73253	1.4446	1.6469	2.3792	0.95107
1.5000	0.71583	1.4968	1.7128	2.5637	0.93811
1.5500	0.70059	1.5500	1.7771	2.7544	0.92393
1.6000	0.68662	1.6042	1.8398	2.9515	0.90865
1.6500	0.67379	1.6596	1.9009	3.1547	0.89244
1.7000	0.66198	1.7162	1.9603	3.3643	0.87542
1.7500	0.65107	1.7740	2.0180	3.5801	0.85773
1.8000	0.64098	1.8331	2.0741	3.8021	0.83950
1.8500	0.63162	1.8935	2.1286	4.0304	0.82085
1.9000	0.62292	1.9552	2.1813	4.2649	0.80189
1.9500	0.61483	2.0183	2.2325	4.5057	0.78271
2.0000	0.60728	2.0827	2.2821	4.7528	0.76342
2.1000	0.59364	2.2158	2.3765	5.2657	0.72481
2.2000	0.58167	2.3545	2.4649	5.8036	0.68661
2.3000	0.57111	2.4991	2.5475	6.3665	0.64926
2.4000	0.56174	2.6495	2.6248	6.9545	0.61306
2.5000	0.55339	2.8059	2.6970	7.5674	0.57825
2.6000	0.54591	2.9683	2.7644	8.2054	0.54497
2.7000	0.53920	3.1366	2.8273	8.8684	0.51332

Table 3.4: Standard Normal Shock Table k=1.67 (continue)

M_x	M_y	$\frac{T_y}{T_x}$	$\frac{\rho_y}{\rho_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0_y}}{P_{0_x}}$
2.8000	0.53315	3.3111	2.8862	9.5564	0.48333
2.9000	0.52768	3.4917	2.9411	10.2694	0.45501
3.0000	0.52271	3.6783	2.9925	11.0075	0.42834
3.5000	0.50362	4.7041	3.2043	15.0730	0.31771
4.0000	0.49096	5.8848	3.3585	19.7640	0.23839
4.5000	0.48215	7.2214	3.4731	25.0805	0.18163
5.0000	0.47578	8.7142	3.5600	31.0225	0.14065
5.5000	0.47103	10.3635	3.6271	37.5899	0.11063
6.0000	0.46739	12.1694	3.6799	44.7828	0.08831
6.5000	0.46454	14.1321	3.7221	52.6011	0.07146
7.0000	0.46227	16.2516	3.7562	61.0449	0.05854
7.5000	0.46043	18.5279	3.7843	70.1142	0.04850
8.0000	0.45893	20.9611	3.8075	79.8090	0.04059
8.5000	0.45768	23.5511	3.8270	90.1292	0.03428
9.0000	0.45663	26.2981	3.8434	101.07	0.02920
9.5000	0.45574	29.2019	3.8575	112.65	0.02507
10.0000	0.45497	32.2627	3.8696	124.84	0.02167
20.0000	0.44966	126.44	3.9556	500.12	0.00288
25	0.44902	$2.E+2$	3.966	$7.8E+2$	0.00149
30	0.44867	$2.8E+2$	3.972	$1.1E+3$	0.000868
35	0.44846	$3.9E+2$	3.975	$1.5E+3$	0.000549
40	0.44833	$5.0E+2$	3.978	$2.E+3$	0.000369
45	0.44823	$6.4E+2$	3.979	$2.5E+3$	0.00026
50	0.44817	$7.9E+2$	3.98	$3.1E+3$	0.00019
55	0.44812	$9.5E+2$	3.981	$3.8E+3$	0.000143
60	0.44808	$1.1E+3$	3.982	$4.5E+3$	0.00011
65	0.44805	$1.3E+3$	3.982	$5.3E+3$	$8.69E-5$
70	0.44803	$1.5E+3$	3.983	$6.1E+3$	$6.97E-5$

3.2 Open Valve maximum values

k	$\mathbf{M_x}$	$\mathbf{M_y}$	$\mathbf{{M_y}'}$	$\frac{\mathbf{T_y}}{\mathbf{T_x}}$
1.30	1073.25	0.33968	2.2645	169842.29
1.40	985.85	0.37797	1.8898	188982.96
1.50	922.23	0.40825	1.6330	204124.86
1.60	873.09	0.43301	1.4434	216507.05
1.70	833.61	0.45374	1.2964	226871.99
1.80	801.02	0.47141	1.1785	235702.93
1.90	773.54	0.48667	1.0815	243332.79
2.00	750.00	0.50000	1.00000	250000.64
2.10	729.56	0.51177	0.93048	255883.78
2.20	711.62	0.52223	0.87039	261117.09
2.30	695.74	0.53161	0.81786	265805.36
2.40	681.56	0.54006	0.77151	270031.44
2.50	668.81	0.54772	0.73029	273861.85

Table of maximum values of the shock-chocking phenomenon.

3.3 Shock Reflecting from a Suddenly Closed Valve

3.3.1 Reflecting Shock (closed Valve) k =1.2

Table 3.5: Isothermal Flow k=1.2

M	$\frac{\mathbf{4fL}}{\mathbf{D}}$	$\frac{\mathbf{P}}{\mathbf{P^*}}$	$\frac{\mathbf{P_0}}{\mathbf{{P_0}^*}}$	$\frac{\rho}{\rho^*}$	$\frac{\mathbf{T_0}}{\mathbf{{T_0}^*}}$
0.01000	8323.31	91.2871	56.4759	91.2871	0.92309
0.02000	2074.69	45.6435	28.2430	45.6435	0.92311
0.03000	918.10	30.4290	18.8343	30.4290	0.92316
0.04000	513.58	22.8218	14.1317	22.8218	0.92322
0.05000	326.52	18.2574	11.3114	18.2574	0.92331
0.06000	225.04	15.2145	9.4324	15.2145	0.92341
0.07000	163.93	13.0410	8.0912	13.0410	0.92353
0.08000	124.34	11.4109	7.0862	11.4109	0.92367

Table 3.5: Isothermal Flow k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{T_0{}^*}$
0.09000	97.2471	10.1430	6.3053	10.1430	0.92382
0.10000	77.9105	9.1287	5.6812	9.1287	0.92400
0.11000	63.6383	8.2988	5.1712	8.2988	0.92419
0.12000	52.8122	7.6073	4.7468	7.6073	0.92441
0.13000	44.4115	7.0221	4.3883	7.0221	0.92464
0.14000	37.7671	6.5205	4.0814	6.5205	0.92489
0.15000	32.4251	6.0858	3.8159	6.0858	0.92515
0.16000	28.0692	5.7054	3.5841	5.7054	0.92544
0.17000	24.4735	5.3698	3.3799	5.3698	0.92574
0.18000	21.4729	5.0715	3.1988	5.0715	0.92607
0.19000	18.9449	4.8046	3.0372	4.8046	0.92641
0.20000	16.7968	4.5644	2.8921	4.5644	0.92677
0.21000	14.9575	4.3470	2.7611	4.3470	0.92715
0.22000	13.3717	4.1494	2.6424	4.1494	0.92754
0.23000	11.9960	3.9690	2.5343	3.9690	0.92796
0.24000	10.7957	3.8036	2.4355	3.8036	0.92839
0.25000	9.7431	3.6515	2.3449	3.6515	0.92885
0.26000	8.8156	3.5110	2.2616	3.5110	0.92932
0.27000	7.9948	3.3810	2.1847	3.3810	0.92981
0.28000	7.2656	3.2603	2.1136	3.2603	0.93031
0.29000	6.6154	3.1478	2.0477	3.1478	0.93084
0.30000	6.0336	3.0429	1.9864	3.0429	0.93138
0.31000	5.5115	2.9447	1.9293	2.9447	0.93195
0.32000	5.0415	2.8527	1.8760	2.8527	0.93253
0.33000	4.6173	2.7663	1.8262	2.7663	0.93313
0.34000	4.2335	2.6849	1.7795	2.6849	0.93375
0.35000	3.8854	2.6082	1.7358	2.6082	0.93438
0.36000	3.5691	2.5358	1.6947	2.5358	0.93504
0.37000	3.2810	2.4672	1.6560	2.4672	0.93571
0.38000	3.0182	2.4023	1.6196	2.4023	0.93641
0.39000	2.7780	2.3407	1.5853	2.3407	0.93712
0.40000	2.5581	2.2822	1.5529	2.2822	0.93785
0.41000	2.3565	2.2265	1.5223	2.2265	0.93859

Table 3.5: Isothermal Flow k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{{T_0}^*}$
0.42000	2.1714	2.1735	1.4933	2.1735	0.93936
0.43000	2.0013	2.1230	1.4659	2.1230	0.94014
0.44000	1.8448	2.0747	1.4400	2.0747	0.94095
0.45000	1.7005	2.0286	1.4153	2.0286	0.94177
0.46000	1.5675	1.9845	1.3920	1.9845	0.94261
0.47000	1.4447	1.9423	1.3699	1.9423	0.94347
0.48000	1.3313	1.9018	1.3488	1.9018	0.94434
0.49000	1.2264	1.8630	1.3288	1.8630	0.94524
0.50000	1.1294	1.8257	1.3098	1.8257	0.94615
0.51000	1.0395	1.7899	1.2917	1.7899	0.94709
0.52000	0.95632	1.7555	1.2746	1.7555	0.94804
0.53000	0.87922	1.7224	1.2582	1.7224	0.94901
0.54000	0.80775	1.6905	1.2426	1.6905	0.94999
0.55000	0.74147	1.6598	1.2278	1.6598	0.95100
0.56000	0.68000	1.6301	1.2137	1.6301	0.95202
0.57000	0.62298	1.6015	1.2003	1.6015	0.95307
0.58000	0.57008	1.5739	1.1875	1.5739	0.95413
0.59000	0.52100	1.5472	1.1753	1.5472	0.95521
0.60000	0.47549	1.5215	1.1637	1.5215	0.95631
0.61000	0.43327	1.4965	1.1527	1.4965	0.95742
0.62000	0.39413	1.4724	1.1422	1.4724	0.95856
0.63000	0.35786	1.4490	1.1322	1.4490	0.95971
0.64000	0.32425	1.4264	1.1227	1.4264	0.96089
0.65000	0.29314	1.4044	1.1137	1.4044	0.96208
0.66000	0.26436	1.3831	1.1051	1.3831	0.96329
0.67000	0.23776	1.3625	1.0969	1.3625	0.96451
0.68000	0.21319	1.3425	1.0892	1.3425	0.96576
0.69000	0.19053	1.3230	1.0819	1.3230	0.96702
0.70000	0.16965	1.3041	1.0750	1.3041	0.96831
0.71000	0.15045	1.2857	1.0684	1.2857	0.96961
0.72000	0.13282	1.2679	1.0622	1.2679	0.97093
0.73000	0.11667	1.2505	1.0563	1.2505	0.97227
0.74000	0.10190	1.2336	1.0508	1.2336	0.97362

Table 3.5: Isothermal Flow k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{T_0{}^*}$
0.75000	0.08844	1.2172	1.0456	1.2172	0.97500
0.76000	0.07620	1.2011	1.0407	1.2011	0.97639
0.77000	0.06511	1.1855	1.0362	1.1855	0.97781
0.78000	0.05511	1.1703	1.0319	1.1703	0.97924
0.79000	0.04613	1.1555	1.0279	1.1555	0.98069
0.80000	0.03812	1.1411	1.0242	1.1411	0.98215
0.81000	0.03101	1.1270	1.0208	1.1270	0.98364
0.82000	0.02476	1.1133	1.0176	1.1133	0.98514
0.83000	0.01932	1.0998	1.0147	1.0998	0.98667
0.84000	0.01464	1.0868	1.0121	1.0868	0.98821
0.85000	0.01069	1.0740	1.0097	1.0740	0.98977
0.86000	0.00741	1.061	1.008	1.061	0.99135
0.87	0.00478	1.049	1.006	1.049	0.99294
0.88	0.00276	1.037	1.004	1.037	0.99456
0.89	0.00131	1.026	1.002	1.026	0.99619
0.9	0.000407	1.014	1.001	1.014	0.99785
0.91	$1.99E{-}5$	1.003	1	1.003	0.99952
0.91032	$1.57E{-}5$	1.003	1	1.003	0.99957
0.91064	$1.2E{-}5$	1.002	1	1.002	0.99962
0.91096	$8.82E{-}6$	1.002	1	1.002	0.99968
0.91128	$6.12E{-}6$	1.002	1	1.002	0.99973
0.91159	$3.92E{-}6$	1.001	1	1.001	0.99979
0.91191	$2.2E{-}6$	1.001	1	1.001	0.99984
0.91223	0	1.001	1	1.001	0.99989
0.91255	0	1	1	1	0.99995
0.91287	0	1	1	1	1

3.3.2 Reflecting Shock (closed Valve) k =1.3

Table 3.6: Table for shock reflecting from a suddenly closed end (k=1.3)

M_x	M_y	$M_x{}'$	$M_y{}'$	$\frac{T_y}{T_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0_y}}{P_{0_x}}$
1.0058	0.99428	0.01	0	1.003	1.013	1
1.012	0.9886	0.02	0	1.006	1.026	1
1.017	0.98297	0.03	0	1.009	1.04	0.99999
1.023	0.9774	0.04	0	1.012	1.053	0.99998
1.029	0.97187	0.05	0	1.015	1.067	0.99997
1.035	0.96639	0.06	0	1.018	1.081	0.99995
1.041	0.96096	0.07	0	1.021	1.095	0.99992
1.047	0.95558	0.08	0	1.024	1.109	0.99987
1.053	0.95024	0.09	0	1.027	1.123	0.99982
1.059	0.94495	0.1	0	1.03	1.138	0.99976
1.122	0.89458	0.2	0	1.061	1.292	0.9981
1.196	0.84308	0.3125	0	1.097	1.486	0.993
1.274	0.79661	0.425	0	1.135	1.704	0.98304
1.356	0.75476	0.5375	0	1.175	1.947	0.96716
1.441	0.7171	0.65	0	1.218	2.218	0.94471
1.53	0.68326	0.7625	0	1.263	2.517	0.91554
1.623	0.65288	0.875	0	1.311	2.846	0.87995
1.718	0.6256	0.9875	0	1.363	3.205	0.83862
1.816	0.60112	1.1	0	1.418	3.597	0.79254
1.905	0.58147	1.2	0	1.47	3.972	0.74854
1.996	0.56362	1.3	0	1.525	4.373	0.7026
2.089	0.54738	1.4	0	1.583	4.802	0.65559
2.183	0.5326	1.5	0	1.645	5.257	0.60835
2.279	0.51913	1.6	0	1.71	5.74	0.56162
2.376	0.50686	1.7	0	1.778	6.251	0.51603
2.474	0.49566	1.8	0	1.85	6.79	0.47211
2.574	0.48542	1.9	0	1.925	7.357	0.43026
2.674	0.47605	2	0	2.004	7.952	0.39076
2.775	0.46747	2.1	0	2.087	8.577	0.3538
2.878	0.4596	2.2	0	2.173	9.23	0.31949
2.981	0.45236	2.3	0	2.263	9.912	0.28783
3.084	0.44571	2.4	0	2.357	10.62	0.2588

Table 3.6: Reflection shock suddenly closed valve k=1.3 (continue)

M_x	M_y	$M_x{}'$	$M_y{}'$	$\frac{T_y}{T_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0y}}{P_{0x}}$
3.189	0.43959	2.5	0	2.454	11.36	0.23231
3.294	0.43393	2.6	0	2.555	12.13	0.20824
3.399	0.42871	2.7	0	2.66	12.93	0.18646
3.505	0.42388	2.8	0	2.768	13.76	0.16682
3.612	0.41941	2.9	0	2.881	14.62	0.14915

3.3.3 Reflecting Shock (closed Valve) k =1.4

Table 3.7: Table for Shock Reflecting from a suddenly closed end (k=1.4)

M_x	M_y	$M_x{}'$	$M_y{}'$	$\frac{T_y}{T_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0y}}{P_{0x}}$
1.0060	0.99403	0.01	0	1.004	1.014	1
1.012	0.98812	0.02	0	1.008	1.028	1
1.018	0.98227	0.03	0	1.012	1.043	0.99999
1.024	0.97647	0.04	0	1.016	1.057	0.99998
1.03	0.97074	0.05	0	1.02	1.072	0.99997
1.037	0.96506	0.06	0	1.024	1.087	0.99994
1.043	0.95944	0.07	0	1.028	1.102	0.99991
1.049	0.95387	0.08	0	1.032	1.118	0.99986
1.055	0.94836	0.09	0	1.036	1.133	0.9998
1.062	0.94291	0.1	0	1.04	1.149	0.99973
1.127	0.89128	0.2	0	1.082	1.316	0.9979
1.205	0.83912	0.3125	0	1.131	1.527	0.99232
1.287	0.79264	0.425	0	1.183	1.766	0.98156
1.373	0.75127	0.5375	0	1.237	2.033	0.96461
1.463	0.71447	0.65	0	1.296	2.332	0.94098
1.557	0.68177	0.7625	0	1.359	2.662	0.91069
1.654	0.65273	0.875	0	1.426	3.027	0.87423
1.755	0.62693	0.9875	0	1.498	3.426	0.83247
1.858	0.60401	1.1	0	1.576	3.862	0.78652
1.952	0.58578	1.2	0	1.649	4.28	0.74316

Table 3.7: ?? (continue)

M_x	M_y	$M_x{}'$	$M_y{}'$	$\frac{T_y}{T_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0y}}{P_{0x}}$
2.048	0.56935	1.3	0	1.727	4.728	0.69834
2.146	0.55453	1.4	0	1.81	5.206	0.6529
2.245	0.54114	1.5	0	1.897	5.715	0.60761
2.346	0.52904	1.6	0	1.99	6.256	0.56312
2.448	0.51808	1.7	0	2.087	6.827	0.51996
2.552	0.50814	1.8	0	2.189	7.431	0.47855
2.656	0.49912	1.9	0	2.297	8.066	0.43921
2.762	0.49092	2.0	0	2.41	8.734	0.40213
2.869	0.48344	2.1	0	2.528	9.434	0.36744
2.976	0.47662	2.2	0	2.651	10.17	0.33518
3.084	0.47039	2.3	0	2.779	10.93	0.30534
3.193	0.46469	2.4	0	2.913	11.73	0.27787
3.303	0.45946	2.5	0	3.053	12.56	0.25267
3.413	0.45466	2.6	0	3.198	13.42	0.22962
3.524	0.45024	2.7	0	3.348	14.32	0.20861
3.635	0.44617	2.8	0	3.503	15.25	0.18949
3.747	0.44241	2.9	0	3.664	16.21	0.17212

3.3.4 Reflecting Shock (closed Valve) k =1.67

Table 3.8: Table for Shock Reflecting from a suddenly closed end (k=1.67)

M_x	M_y	$M_x{}'$	$M_y{}'$	$\frac{T_y}{T_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0y}}{P_{0x}}$
1.0067	0.99337	0.01	0	1.007	1.017	1
1.013	0.98683	0.02	0	1.013	1.034	1
1.02	0.98037	0.03	0	1.02	1.051	0.99999
1.027	0.974	0.04	0	1.027	1.069	0.99998
1.034	0.96771	0.05	0	1.034	1.086	0.99995
1.041	0.96151	0.06	0	1.041	1.104	0.99992
1.048	0.95539	0.07	0	1.048	1.122	0.99988
1.055	0.94935	0.08	0	1.054	1.141	0.99982

Table 3.8: Reflecting shock suddenly closed valve k=1.67 (continue)

M_x	M_y	$M_x{}'$	$M_y{}'$	$\frac{T_y}{T_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0y}}{P_{0x}}$
1.062	0.94338	0.09	0	1.061	1.16	0.99974
1.069	0.9375	0.1	0	1.068	1.179	0.99965
1.142	0.88274	0.2	0	1.14	1.382	0.99732
1.23	0.82913	0.3125	0	1.225	1.642	0.99043
1.323	0.78285	0.425	0	1.316	1.939	0.97755
1.421	0.74288	0.5375	0	1.415	2.276	0.95792
1.524	0.70836	0.65	0	1.522	2.654	0.93146
1.631	0.67853	0.7625	0	1.638	3.077	0.89869
1.742	0.65273	0.875	0	1.765	3.546	0.86055
1.857	0.63039	0.9875	0	1.902	4.062	0.81827
1.975	0.61101	1.1	0	2.05	4.628	0.77313
2.082	0.59593	1.2	0	2.192	5.173	0.73165
2.192	0.5826	1.3	0	2.343	5.758	0.68974
2.303	0.57079	1.4	0	2.504	6.385	0.64809
2.416	0.5603	1.5	0	2.675	7.053	0.60727
2.531	0.55098	1.6	0	2.856	7.763	0.56773
2.647	0.54265	1.7	0	3.047	8.516	0.52981
2.765	0.53522	1.8	0	3.249	9.311	0.49372
2.883	0.52855	1.9	0	3.461	10.15	0.45962
3.003	0.52256	2	0	3.684	11.03	0.42756
3.124	0.51717	2.1	0	3.918	11.95	0.39756
3.245	0.51231	2.2	0	4.162	12.92	0.3696
3.367	0.50791	2.3	0	4.417	13.93	0.3436
3.49	0.50391	2.4	0	4.683	14.99	0.3195
3.614	0.50028	2.5	0	4.96	16.09	0.29718
3.738	0.49698	2.6	0	5.248	17.23	0.27655
3.863	0.49396	2.7	0	5.547	18.42	0.25749
3.989	0.4912	2.8	0	5.856	19.65	0.2399
4.115	0.48867	2.9	0	6.177	20.93	0.22368

3.4 Shock propagating from suddenly open valve

3.4.1 Shock from suddenly open valve k =1.2

Table 3.9: Shock from suddenly open valve k=1.2 order M_y

$\mathbf{M_x}$	$\mathbf{M_y}$	$\mathbf{M_x}'$	$\mathbf{M_y}'$	$\frac{\mathbf{T_y}}{\mathbf{T_x}}$	$\frac{\mathbf{P_y}}{\mathbf{P_x}}$	$\frac{\mathbf{P_{0y}}}{\mathbf{P_{0x}}}$
916.67	0.28868	0	2.887	$8.3E{+}4$	$9.2E{+}5$	0
33.95	0.28993	0	2.872	$1.2E{+}2$	$1.3E{+}3$	0
23.99	0.29119	0	2.857	58.07	$6.3E{+}2$	0
19.57	0.29245	0	2.843	38.97	$4.2E{+}2$	0
16.93	0.29371	0	2.828	29.41	$3.1E{+}2$	0
15.13	0.29497	0	2.814	23.68	$2.5E{+}2$	$1.41E{-}6$
13.8	0.29623	0	2.8	19.86	$2.1E{+}2$	$3.38E{-}6$
12.76	0.29748	0	2.785	17.13	$1.8E{+}2$	$7.02E{-}6$
11.92	0.29874	0	2.771	15.08	$1.6E{+}2$	$1.32E{-}5$
11.23	0.3	0	2.758	13.49	$1.4E{+}2$	$2.28E{-}5$
8.118	0.31	0	2.651	7.518	71.8	0.000398
6.645	0.32	0	2.55	5.36	48.08	0.00203
5.74	0.33	0	2.455	4.249	35.85	0.0061
5.111	0.34	0	2.365	3.571	28.41	0.013695
4.641	0.35	0	2.279	3.116	23.4	0.025591
4.271	0.36	0	2.198	2.788	19.81	0.042155
3.971	0.37	0	2.121	2.542	17.11	0.063397
3.721	0.38	0	2.047	2.35	15.01	0.089035
3.508	0.39	0	1.976	2.197	13.33	0.11859
3.323	0.4	0	1.909	2.071	11.96	0.15145
3.162	0.41	0	1.845	1.967	10.81	0.18696
3.019	0.42	0	1.783	1.878	9.85	0.22446
2.891	0.43	0	1.723	1.802	9.025	0.26331
2.776	0.44	0	1.666	1.737	8.313	0.30293
2.671	0.45	0	1.611	1.679	7.692	0.34281
2.576	0.46	0	1.558	1.629	7.147	0.38249

Table 3.9: Shock from suddenly open valve k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\mathbf{M_x}'$	$\mathbf{M_y}'$	$\frac{\mathbf{T_y}}{\mathbf{T_x}}$	$\frac{\mathbf{P_y}}{\mathbf{P_x}}$	$\frac{\mathbf{P_{0y}}}{\mathbf{P_{0x}}}$
2.488	0.47	0	1.507	1.584	6.663	0.42161
2.408	0.48	0	1.458	1.544	6.233	0.45985
2.333	0.49	0	1.41	1.508	5.847	0.49697
2.264	0.5	0	1.364	1.476	5.5	0.53276
2.199	0.51	0	1.319	1.446	5.186	0.5671
2.139	0.52	0	1.276	1.419	4.9	0.59986
2.082	0.53	0	1.233	1.394	4.64	0.631
2.029	0.54	0	1.193	1.372	4.401	0.66048
1.979	0.55	0	1.153	1.351	4.183	0.68828
1.932	0.56	0	1.114	1.331	3.981	0.71441
1.887	0.57	0	1.077	1.314	3.795	0.7389
1.845	0.58	0	1.04	1.297	3.622	0.7618
1.805	0.59	0	1.004	1.281	3.462	0.78315
1.766	0.6	0	0.9697	1.266	3.313	0.803
1.73	0.61	0	0.93577	1.253	3.174	0.82142
1.695	0.62	0	0.90264	1.24	3.045	0.83847
1.662	0.63	0	0.87027	1.228	2.923	0.85423
1.631	0.64	0	0.83864	1.216	2.81	0.86875
1.6	0.65	0	0.80769	1.205	2.703	0.88211
1.571	0.66	0	0.77741	1.195	2.602	0.89438
1.543	0.67	0	0.74776	1.185	2.508	0.90562
1.517	0.68	0	0.71872	1.176	2.418	0.91589
1.491	0.69	0	0.69025	1.167	2.334	0.92527
1.466	0.7	0	0.66234	1.158	2.254	0.9338
1.442	0.71	0	0.63496	1.15	2.179	0.94156
1.419	0.72	0	0.60808	1.142	2.107	0.94858
1.397	0.73	0	0.58169	1.135	2.039	0.95493
1.376	0.74	0	0.55577	1.128	1.974	0.96065
1.355	0.75	0	0.5303	1.121	1.913	0.96579
1.335	0.76	0	0.50526	1.114	1.855	0.97041
1.316	0.77	0	0.48064	1.108	1.799	0.97452
1.298	0.78	0	0.45641	1.101	1.746	0.97819

Table 3.9: Shock from suddenly open valve k=1.2 (continue)

M_x	M_y	$M_x{}'$	$M_y{}'$	$\frac{T_y}{T_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0y}}{P_{0x}}$
1.28	0.79	0	0.43257	1.095	1.695	0.98144
1.262	0.8	0	0.40909	1.09	1.647	0.98431
1.245	0.81	0	0.38597	1.084	1.6	0.98684
1.229	0.82	0	0.36319	1.078	1.556	0.98904
1.213	0.83	0	0.34074	1.073	1.514	0.99096
1.197	0.84	0	0.31861	1.068	1.473	0.99262
1.182	0.85	0	0.29679	1.063	1.434	0.99405
1.168	0.86	0	0.27526	1.058	1.397	0.99526
1.154	0.87	0	0.25402	1.053	1.361	0.99628
1.14	0.88	0	0.23306	1.049	1.326	0.99713
1.126	0.89	0	0.21236	1.044	1.293	0.99784
1.113	0.9	0	0.19192	1.04	1.261	0.99841
1.101	0.91	0	0.17173	1.035	1.231	0.99886
1.088	0.92	0	0.15178	1.031	1.201	0.99921
1.076	0.93	0	0.13206	1.027	1.173	0.99948
1.065	0.94	0	0.11257	1.023	1.145	0.99968
1.053	0.95	0	0.093301	1.019	1.119	0.99982
1.042	0.96	0	0.074242	1.015	1.094	0.99991
1.031	0.97	0	0.055389	1.011	1.069	0.99996
1.02	0.98	0	0.036735	1.007	1.045	0.99999
1.01	0.99	0	0.018274	1.004	1.022	1
1	1	0	0	1	1	1

3.4.2 Shock from suddenly open valve k =1.3

Table 3.10: Shock from suddenly open valve k=1.3 order M_y

M_x	M_y	$M_x{}'$	$M_y{}'$	$\frac{T_y}{T_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0y}}{P_{0x}}$
884.62	0.33968	0	2.265	$1.2E{+}5$	$8.8E{+}5$	0
13.05	0.34639	0	2.209	26.07	$1.9E{+}2$	0.00014
9.186	0.35309	0	2.156	13.41	95.26	0.00124

Table 3.10: Shock from suddenly open valve k=1.3 order M_y (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\mathbf{M_x}'$	$\mathbf{M_y}'$	$\frac{\mathbf{T_y}}{\mathbf{T_x}}$	$\frac{\mathbf{P_y}}{\mathbf{P_x}}$	$\frac{\mathbf{P_{0_y}}}{\mathbf{P_{0_x}}}$
7.467	0.35979	0	2.104	9.185	62.9	0.00422
6.438	0.36649	0	2.054	7.075	46.73	0.00971
5.734	0.37319	0	2.006	5.81	37.03	0.018082
5.212	0.37989	0	1.959	4.966	30.57	0.029452
4.804	0.3866	0	1.913	4.365	25.96	0.043781
4.475	0.3933	0	1.869	3.913	22.51	0.060903
4.202	0.4	0	1.826	3.563	19.83	0.080573
3.868	0.41	0	1.764	3.164	16.78	0.11402
3.597	0.42	0	1.705	2.865	14.5	0.15144
3.372	0.43	0	1.648	2.633	12.73	0.19179
3.181	0.44	0	1.594	2.447	11.31	0.23409
3.016	0.45	0	1.541	2.295	10.15	0.27749
2.872	0.46	0	1.49	2.168	9.194	0.32125
2.744	0.47	0	1.441	2.061	8.384	0.36476
2.63	0.48	0	1.394	1.97	7.691	0.40753
2.528	0.49	0	1.349	1.89	7.093	0.44917
2.435	0.5	0	1.304	1.821	6.571	0.48939
2.35	0.51	0	1.262	1.76	6.113	0.52795
2.272	0.52	0	1.22	1.705	5.707	0.56473
2.201	0.53	0	1.18	1.657	5.345	0.59961
2.135	0.54	0	1.141	1.613	5.02	0.63255
2.073	0.55	0	1.103	1.573	4.728	0.66353
2.016	0.56	0	1.066	1.537	4.463	0.69257
1.962	0.57	0	1.03	1.504	4.222	0.7197
1.912	0.58	0	0.9949	1.474	4.003	0.74497
1.865	0.59	0	0.9608	1.446	3.801	0.76845
1.821	0.6	0	0.92754	1.42	3.616	0.7902
1.779	0.61	0	0.89508	1.397	3.446	0.81032
1.739	0.62	0	0.86339	1.374	3.288	0.82888
1.702	0.63	0	0.83244	1.354	3.142	0.84596
1.666	0.64	0	0.80217	1.334	3.007	0.86165
1.632	0.65	0	0.77258	1.316	2.88	0.87604

Table 3.10: Shock from suddenly open valve k=1.3 order M_y (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\mathbf{M_x}'$	$\mathbf{M_y}'$	$\frac{\mathbf{T_y}}{\mathbf{T_x}}$	$\frac{\mathbf{P_y}}{\mathbf{P_x}}$	$\frac{\mathbf{P_{0y}}}{\mathbf{P_{0x}}}$
1.6	0.66	0	0.74361	1.299	2.763	0.88921
1.569	0.67	0	0.71525	1.283	2.652	0.90123
1.54	0.68	0	0.68747	1.268	2.549	0.91219
1.512	0.69	0	0.66024	1.253	2.452	0.92215
1.485	0.7	0	0.63354	1.24	2.361	0.93119
1.459	0.71	0	0.60735	1.227	2.276	0.93938
1.434	0.72	0	0.58164	1.214	2.195	0.94678
1.411	0.73	0	0.5564	1.202	2.119	0.95344
1.388	0.74	0	0.53161	1.191	2.047	0.95943
1.366	0.75	0	0.50725	1.18	1.978	0.96481
1.345	0.76	0	0.4833	1.17	1.914	0.96961
1.324	0.77	0	0.45974	1.16	1.853	0.97389
1.305	0.78	0	0.43657	1.15	1.794	0.97768
1.286	0.79	0	0.41376	1.141	1.739	0.98104
1.268	0.8	0	0.3913	1.132	1.686	0.984
1.25	0.81	0	0.36919	1.124	1.636	0.9866
1.233	0.82	0	0.3474	1.116	1.588	0.98887
1.216	0.83	0	0.32593	1.108	1.542	0.99083
1.201	0.84	0	0.30476	1.1	1.499	0.99253
1.185	0.85	0	0.28389	1.092	1.457	0.99398
1.17	0.86	0	0.2633	1.085	1.417	0.99521
1.156	0.87	0	0.24298	1.078	1.379	0.99625
1.141	0.88	0	0.22292	1.071	1.342	0.99711
1.128	0.89	0	0.20313	1.064	1.307	0.99782
1.114	0.9	0	0.18357	1.058	1.274	0.9984
1.102	0.91	0	0.16426	1.051	1.241	0.99886
1.089	0.92	0	0.14518	1.045	1.21	0.99921
1.077	0.93	0	0.12632	1.039	1.18	0.99948
1.065	0.94	0	0.10768	1.033	1.152	0.99968
1.053	0.95	0	0.089245	1.027	1.124	0.99982
1.042	0.96	0	0.071014	1.022	1.097	0.99991
1.031	0.97	0	0.052981	1.016	1.072	0.99996

Table 3.10: Shock from suddenly open valve k=1.3 order M_y (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\mathbf{M_x}'$	$\mathbf{M_y}'$	$\frac{\mathbf{T_y}}{\mathbf{T_x}}$	$\frac{\mathbf{P_y}}{\mathbf{P_x}}$	$\frac{\mathbf{P_{0y}}}{\mathbf{P_{0x}}}$
1.021	0.98	0	0.035138	1.011	1.047	0.99999
1.01	0.99	0	0.017479	1.005	1.023	1
1	1	0	0	1	1	1

3.4.3 Shock from suddenly open valve k =1.4

Table 3.11: Shock from suddenly open valve k=1.4 order M_y

$\mathbf{M_x}$	$\mathbf{M_y}$	$\mathbf{M_x}'$	$\mathbf{M_y}'$	$\frac{\mathbf{T_y}}{\mathbf{T_x}}$	$\frac{\mathbf{P_y}}{\mathbf{P_x}}$	$\frac{\mathbf{P_{0y}}}{\mathbf{P_{0x}}}$
857.14	0.37797	0	1.89	$1.4E{+}5$	$8.6E{+}5$	0
19.89	0.38041	0	1.874	77.87	$4.6E{+}2$	0.000111
14.05	0.38286	0	1.858	39.31	$2.3E{+}2$	0.000604
11.45	0.38531	0	1.842	26.45	$1.5E{+}2$	0.00161
9.905	0.38776	0	1.826	20.02	$1.1E{+}2$	0.00318
8.847	0.39021	0	1.81	16.16	91.14	0.00537
8.065	0.39266	0	1.795	13.59	75.71	0.00819
7.456	0.3951	0	1.78	11.75	64.69	0.011628
6.965	0.39755	0	1.765	10.37	56.43	0.015693
6.557	0.4	0	1.75	9.302	50	0.020366
5.408	0.41	0	1.691	6.627	33.96	0.045327
4.695	0.42	0	1.634	5.225	25.55	0.078377
4.197	0.43	0	1.58	4.362	20.39	0.11759
3.824	0.44	0	1.527	3.778	16.89	0.16116
3.53	0.45	0	1.477	3.356	14.37	0.20749
3.291	0.46	0	1.428	3.038	12.47	0.25527
3.091	0.47	0	1.381	2.788	10.98	0.30346
2.922	0.48	0	1.336	2.588	9.791	0.35121
2.775	0.49	0	1.292	2.423	8.814	0.39792
2.646	0.5	0	1.25	2.286	8	0.44311
2.532	0.51	0	1.209	2.169	7.311	0.48645
2.43	0.52	0	1.169	2.069	6.72	0.52772

Table 3.11: ?? (continue)

M_x	M_y	$M_x{}'$	$M_y{}'$	$\frac{T_y}{T_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0y}}{P_{0x}}$
2.338	0.53	0	1.131	1.982	6.209	0.56679
2.254	0.54	0	1.093	1.905	5.763	0.60357
2.178	0.55	0	1.057	1.838	5.369	0.63805
2.109	0.56	0	1.021	1.778	5.02	0.67025
2.044	0.57	0	0.98699	1.724	4.708	0.70023
1.985	0.58	0	0.95345	1.675	4.429	0.72804
1.929	0.59	0	0.92076	1.631	4.176	0.75378
1.878	0.6	0	0.88889	1.591	3.947	0.77753
1.83	0.61	0	0.85779	1.554	3.739	0.79942
1.785	0.62	0	0.82742	1.52	3.549	0.81952
1.742	0.63	0	0.79775	1.489	3.374	0.83797
1.702	0.64	0	0.76875	1.46	3.213	0.85485
1.664	0.65	0	0.74038	1.433	3.065	0.87027
1.629	0.66	0	0.71263	1.408	2.928	0.88433
1.595	0.67	0	0.68545	1.384	2.801	0.89712
1.563	0.68	0	0.65882	1.362	2.682	0.90874
1.532	0.69	0	0.63273	1.342	2.572	0.91928
1.503	0.7	0	0.60714	1.322	2.469	0.92881
1.475	0.71	0	0.58204	1.304	2.373	0.93741
1.449	0.72	0	0.55741	1.286	2.282	0.94516
1.424	0.73	0	0.53322	1.27	2.198	0.95212
1.399	0.74	0	0.50946	1.254	2.118	0.95837
1.376	0.75	0	0.48611	1.239	2.043	0.96395
1.354	0.76	0	0.46316	1.225	1.972	0.96892
1.332	0.77	0	0.44058	1.211	1.905	0.97335
1.312	0.78	0	0.41838	1.198	1.841	0.97726
1.292	0.79	0	0.39652	1.186	1.781	0.98072
1.273	0.8	0	0.375	1.174	1.724	0.98376
1.255	0.81	0	0.35381	1.162	1.67	0.98641
1.237	0.82	0	0.33293	1.151	1.619	0.98873
1.22	0.83	0	0.31235	1.141	1.57	0.99073
1.204	0.84	0	0.29206	1.13	1.523	0.99246
1.188	0.85	0	0.27206	1.12	1.479	0.99393

Table 3.11: ?? (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\mathbf{M_x}'$	$\mathbf{M_y}'$	$\frac{\mathbf{T_y}}{\mathbf{T_x}}$	$\frac{\mathbf{P_y}}{\mathbf{P_x}}$	$\frac{\mathbf{P_{0y}}}{\mathbf{P_{0x}}}$
1.172	0.86	0	0.25233	1.111	1.436	0.99518
1.157	0.87	0	0.23285	1.101	1.396	0.99623
1.143	0.88	0	0.21364	1.092	1.357	0.9971
1.129	0.89	0	0.19466	1.083	1.32	0.99782
1.115	0.9	0	0.17593	1.075	1.285	0.9984
1.102	0.91	0	0.15742	1.066	1.251	0.99886
1.09	0.92	0	0.13913	1.058	1.218	0.99922
1.077	0.93	0	0.12106	1.05	1.187	0.99949
1.065	0.94	0	0.10319	1.043	1.157	0.99968
1.054	0.95	0	0.085526	1.035	1.128	0.99982
1.042	0.96	0	0.068056	1.028	1.101	0.99991
1.031	0.97	0	0.050773	1.021	1.074	0.99996
1.021	0.98	0	0.033673	1.014	1.048	0.99999
1.01	0.99	0	0.016751	1.007	1.024	1
1	1	0	0	1	1	1

3.4.4 Shock from suddenly open valve k =1.67

Table 3.12: Shock from suddenly open valve k=1.67 order M_y

$\mathbf{M_x}$	$\mathbf{M_y}$	$\mathbf{M_x}'$	$\mathbf{M_y}'$	$\frac{\mathbf{T_y}}{\mathbf{T_x}}$	$\frac{\mathbf{P_y}}{\mathbf{P_x}}$	$\frac{\mathbf{P_{0y}}}{\mathbf{P_{0x}}}$
799.40	0.44788	0	1.337	2$E+5$	8$E+5$	0
11.07	0.45367	0	1.311	39.35	1.5E+2	0.016197
7.811	0.45947	0	1.286	20.02	76.07	0.043367
6.363	0.46526	0	1.261	13.58	50.39	0.075645
5.497	0.47105	0	1.237	10.35	37.56	0.11076
4.906	0.47684	0	1.214	8.421	29.86	0.1474
4.468	0.48263	0	1.191	7.132	24.73	0.1847
4.128	0.48842	0	1.168	6.211	21.06	0.22206
3.853	0.49421	0	1.145	5.521	18.32	0.25906
3.624	0.5	0	1.124	4.983	16.18	0.29542
3.308	0.51	0	1.087	4.291	13.44	0.35605

Table 3.12: ?? (continue)

M_x	M_y	$M_x{}'$	$M_y{}'$	$\frac{T_y}{T_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0y}}{P_{0x}}$
3.059	0.52	0	1.051	3.791	11.45	0.41342
2.856	0.53	0	1.016	3.412	9.955	0.46717
2.688	0.54	0	0.98266	3.115	8.785	0.51717
2.544	0.55	0	0.94995	2.877	7.845	0.56342
2.42	0.56	0	0.91814	2.68	7.074	0.60602
2.311	0.57	0	0.88718	2.516	6.431	0.64514
2.215	0.58	0	0.85703	2.376	5.887	0.68094
2.129	0.59	0	0.82765	2.256	5.42	0.71364
2.052	0.6	0	0.799	2.151	5.015	0.74343
1.982	0.61	0	0.77104	2.059	4.661	0.77053
1.918	0.62	0	0.74375	1.977	4.349	0.79513
1.859	0.63	0	0.71708	1.905	4.072	0.81744
1.805	0.64	0	0.69101	1.839	3.825	0.83764
1.755	0.65	0	0.66551	1.78	3.603	0.85589
1.709	0.66	0	0.64056	1.726	3.402	0.87236
1.666	0.67	0	0.61613	1.677	3.219	0.88721
1.625	0.68	0	0.5922	1.632	3.053	0.90056
1.588	0.69	0	0.56875	1.591	2.902	0.91257
1.552	0.7	0	0.54575	1.552	2.762	0.92333
1.519	0.71	0	0.52318	1.516	2.634	0.93297
1.487	0.72	0	0.50104	1.483	2.515	0.94158
1.457	0.73	0	0.4793	1.452	2.406	0.94926
1.429	0.74	0	0.45794	1.423	2.304	0.9561
1.402	0.75	0	0.43695	1.396	2.209	0.96217
1.377	0.76	0	0.41632	1.37	2.12	0.96754
1.353	0.77	0	0.39603	1.346	2.038	0.97228
1.33	0.78	0	0.37607	1.323	1.96	0.97646
1.307	0.79	0	0.35642	1.301	1.888	0.98012
1.286	0.8	0	0.33708	1.28	1.819	0.98332
1.266	0.81	0	0.31803	1.26	1.755	0.98611
1.247	0.82	0	0.29926	1.241	1.694	0.98852
1.229	0.83	0	0.28076	1.223	1.637	0.9906
1.211	0.84	0	0.26253	1.206	1.583	0.99237

Table 3.12: ?? (continue)

M_x	M_y	$M_x{}'$	$M_y{}'$	$\frac{T_y}{T_x}$	$\frac{P_y}{P_x}$	$\frac{P_{0y}}{P_{0x}}$
1.194	0.85	0	0.24455	1.189	1.532	0.99389
1.177	0.86	0	0.22681	1.174	1.483	0.99516
1.162	0.87	0	0.20931	1.158	1.437	0.99623
1.146	0.88	0	0.19203	1.144	1.393	0.99711
1.132	0.89	0	0.17498	1.129	1.351	0.99783
1.118	0.9	0	0.15814	1.116	1.312	0.99841
1.104	0.91	0	0.1415	1.103	1.274	0.99887
1.091	0.92	0	0.12506	1.09	1.238	0.99923
1.078	0.93	0	0.10882	1.077	1.203	0.99949
1.066	0.94	0	0.092756	1.065	1.17	0.99969
1.054	0.95	0	0.076878	1.054	1.139	0.99982
1.043	0.96	0	0.061174	1.042	1.109	0.99991
1.031	0.97	0	0.045639	1.031	1.08	0.99996
1.021	0.98	0	0.030268	1.021	1.052	0.99999
1.01	0.99	0	0.015057	1.01	1.026	1
1	1	0	0	1	1	1

Chapter 4

Isothermal Flow

4.1 Isothermal Flow k=1.2

Table 4.1: Isothermal Flow k-1.2

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{{T_0}^*}$
0.010	8323.31	91.2871	56.4759	91.2871	0.92309
0.020	2074.69	45.6435	28.2430	45.6435	0.92311
0.030	918.10	30.4290	18.8343	30.4290	0.92316
0.040	513.58	22.8218	14.1317	22.8218	0.92322
0.050	326.52	18.2574	11.3114	18.2574	0.92331
0.060	225.04	15.2145	9.4324	15.2145	0.92341
0.070	163.93	13.0410	8.0912	13.0410	0.92353
0.080	124.34	11.4109	7.0862	11.4109	0.92367
0.090	97.2471	10.1430	6.3053	10.1430	0.92382
0.100	77.9105	9.1287	5.6812	9.1287	0.92400
0.110	63.6383	8.2988	5.1712	8.2988	0.92419
0.120	52.8122	7.6073	4.7468	7.6073	0.92441
0.130	44.4115	7.0221	4.3883	7.0221	0.92464
0.140	37.7671	6.5205	4.0814	6.5205	0.92489
0.150	32.4251	6.0858	3.8159	6.0858	0.92515
0.160	28.0692	5.7054	3.5841	5.7054	0.92544
0.170	24.4735	5.3698	3.3799	5.3698	0.92574
0.180	21.4729	5.0715	3.1988	5.0715	0.92607

Table 4.1: Isothermal Flow k-1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{T_0{}^*}$
0.190	18.9449	4.8046	3.0372	4.8046	0.92641
0.200	16.7968	4.5644	2.8921	4.5644	0.92677
0.210	14.9575	4.3470	2.7611	4.3470	0.92715
0.220	13.3717	4.1494	2.6424	4.1494	0.92754
0.230	11.9960	3.9690	2.5343	3.9690	0.92796
0.240	10.7957	3.8036	2.4355	3.8036	0.92839
0.250	9.7431	3.6515	2.3449	3.6515	0.92885
0.260	8.8156	3.5110	2.2616	3.5110	0.92932
0.270	7.9948	3.3810	2.1847	3.3810	0.92981
0.280	7.2656	3.2603	2.1136	3.2603	0.93031
0.290	6.6154	3.1478	2.0477	3.1478	0.93084
0.300	6.0336	3.0429	1.9864	3.0429	0.93138
0.310	5.5115	2.9447	1.9293	2.9447	0.93195
0.320	5.0415	2.8527	1.8760	2.8527	0.93253
0.330	4.6173	2.7663	1.8262	2.7663	0.93313
0.340	4.2335	2.6849	1.7795	2.6849	0.93375
0.350	3.8854	2.6082	1.7358	2.6082	0.93438
0.360	3.5691	2.5358	1.6947	2.5358	0.93504
0.370	3.2810	2.4672	1.6560	2.4672	0.93571
0.380	3.0182	2.4023	1.6196	2.4023	0.93641
0.390	2.7780	2.3407	1.5853	2.3407	0.93712
0.400	2.5581	2.2822	1.5529	2.2822	0.93785
0.410	2.3565	2.2265	1.5223	2.2265	0.93859
0.420	2.1714	2.1735	1.4933	2.1735	0.93936
0.430	2.0013	2.1230	1.4659	2.1230	0.94014
0.440	1.8448	2.0747	1.4400	2.0747	0.94095
0.450	1.7005	2.0286	1.4153	2.0286	0.94177
0.460	1.5675	1.9845	1.3920	1.9845	0.94261
0.470	1.4447	1.9423	1.3699	1.9423	0.94347
0.480	1.3313	1.9018	1.3488	1.9018	0.94434
0.490	1.2264	1.8630	1.3288	1.8630	0.94524
0.500	1.1294	1.8257	1.3098	1.8257	0.94615
0.510	1.0395	1.7899	1.2917	1.7899	0.94709

Table 4.1: Isothermal Flow k-1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{T_0{}^*}$
0.520	0.95632	1.7555	1.2746	1.7555	0.94804
0.530	0.87922	1.7224	1.2582	1.7224	0.94901
0.540	0.80775	1.6905	1.2426	1.6905	0.94999
0.550	0.74147	1.6598	1.2278	1.6598	0.95100
0.560	0.68000	1.6301	1.2137	1.6301	0.95202
0.570	0.62298	1.6015	1.2003	1.6015	0.95307
0.580	0.57008	1.5739	1.1875	1.5739	0.95413
0.590	0.52100	1.5472	1.1753	1.5472	0.95521
0.600	0.47549	1.5215	1.1637	1.5215	0.95631
0.610	0.43327	1.4965	1.1527	1.4965	0.95742
0.620	0.39413	1.4724	1.1422	1.4724	0.95856
0.630	0.35786	1.4490	1.1322	1.4490	0.95971
0.640	0.32425	1.4264	1.1227	1.4264	0.96089
0.650	0.29314	1.4044	1.1137	1.4044	0.96208
0.660	0.26436	1.3831	1.1051	1.3831	0.96329
0.670	0.23776	1.3625	1.0969	1.3625	0.96451
0.680	0.21319	1.3425	1.0892	1.3425	0.96576
0.690	0.19053	1.3230	1.0819	1.3230	0.96702
0.700	0.16965	1.3041	1.0750	1.3041	0.96831
0.710	0.15045	1.2857	1.0684	1.2857	0.96961
0.720	0.13282	1.2679	1.0622	1.2679	0.97093
0.730	0.11667	1.2505	1.0563	1.2505	0.97227
0.740	0.10190	1.2336	1.0508	1.2336	0.97362
0.750	0.08844	1.2172	1.0456	1.2172	0.97500
0.760	0.07620	1.2011	1.0407	1.2011	0.97639
0.770	0.06511	1.1855	1.0362	1.1855	0.97781
0.780	0.05511	1.1703	1.0319	1.1703	0.97924
0.790	0.04613	1.1555	1.0279	1.1555	0.98069
0.800	0.03812	1.1411	1.0242	1.1411	0.98215
0.810	0.03101	1.1270	1.0208	1.1270	0.98364
0.820	0.02476	1.1133	1.0176	1.1133	0.98514
0.830	0.01932	1.0998	1.0147	1.0998	0.98667
0.840	0.01464	1.0868	1.0121	1.0868	0.98821

Table 4.1: Isothermal Flow k-1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{{T_0}^*}$
0.850	0.01069	1.0740	1.0097	1.0740	0.98977
0.860	0.00741	1.061	1.008	1.061	0.99135
0.87	0.00478	1.049	1.006	1.049	0.99294
0.88	0.00276	1.037	1.004	1.037	0.99456
0.89	0.00131	1.026	1.002	1.026	0.99619
0.9	0.000407	1.014	1.001	1.014	0.99785
0.91	$1.99E{-5}$	1.003	1	1.003	0.99952
0.91032	$1.57E{-5}$	1.003	1	1.003	0.99957
0.91064	$1.2E{-5}$	1.002	1	1.002	0.99962
0.91096	$8.82E{-6}$	1.002	1	1.002	0.99968
0.91128	$6.12E{-6}$	1.002	1	1.002	0.99973
0.91159	$3.92E{-6}$	1.001	1	1.001	0.99979
0.91191	$2.2E{-6}$	1.001	1	1.001	0.99984
0.91223	0	1.001	1	1.001	0.99989
0.91255	0	1	1	1	0.99995
0.91287	0	1	1	1	1

4.2 Isothermal Flow k=1.3

Table 4.2: Isothermal Flow k=1.3

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{{T_0}^*}$
0.01	7682.36	87.7058	54.6449	87.7058	0.89657
0.02	1914.52	43.8529	27.3278	43.8529	0.89661
0.03	846.95	29.2353	18.2244	29.2353	0.89667
0.04	473.59	21.9265	13.6746	21.9265	0.89677
0.05	300.96	17.5412	10.9460	17.5412	0.89689
0.06	207.31	14.6176	9.1282	14.6176	0.89704
0.07	150.93	12.5294	7.8308	12.5294	0.89721
0.08	114.40	10.9632	6.8586	10.9632	0.89741
0.09	89.4132	9.7451	6.1033	9.7451	0.89764
0.10	71.5803	8.7706	5.4997	8.7706	0.89790

Table 4.2: Isothermal Flow k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{{T_0}^*}$
0.11	58.4206	7.9733	5.0066	7.9733	0.89818
0.12	48.4406	7.3088	4.5962	7.3088	0.89849
0.13	40.6985	6.7466	4.2495	6.7466	0.89882
0.14	34.5766	6.2647	3.9529	6.2647	0.89919
0.15	29.6562	5.8471	3.6963	5.8471	0.89958
0.16	25.6453	5.4816	3.4723	5.4816	0.89999
0.17	22.3354	5.1592	3.2750	5.1592	0.90044
0.18	19.5745	4.8725	3.1001	4.8725	0.90091
0.19	17.2492	4.6161	2.9440	4.6161	0.90141
0.20	15.2743	4.3853	2.8038	4.3853	0.90193
0.21	13.5839	4.1765	2.6774	4.1765	0.90248
0.22	12.1273	3.9866	2.5628	3.9866	0.90306
0.23	10.8642	3.8133	2.4585	3.8133	0.90367
0.24	9.7628	3.6544	2.3632	3.6544	0.90430
0.25	8.7975	3.5082	2.2758	3.5082	0.90496
0.26	7.9474	3.3733	2.1955	3.3733	0.90564
0.27	7.1956	3.2484	2.1214	3.2484	0.90636
0.28	6.5280	3.1324	2.0529	3.1324	0.90710
0.29	5.9332	3.0243	1.9894	3.0243	0.90786
0.30	5.4014	2.9235	1.9304	2.9235	0.90866
0.31	4.9245	2.8292	1.8754	2.8292	0.90948
0.32	4.4955	2.7408	1.8241	2.7408	0.91032
0.33	4.1087	2.6578	1.7762	2.6578	0.91120
0.34	3.7590	2.5796	1.7314	2.5796	0.91210
0.35	3.4422	2.5059	1.6894	2.5059	0.91303
0.36	3.1545	2.4363	1.6499	2.4363	0.91398
0.37	2.8928	2.3704	1.6128	2.3704	0.91496
0.38	2.6543	2.3080	1.5778	2.3080	0.91597
0.39	2.4365	2.2489	1.5449	2.2489	0.91701
0.40	2.2375	2.1926	1.5139	2.1926	0.91807
0.41	2.0552	2.1392	1.4846	2.1392	0.91916
0.42	1.8881	2.0882	1.4569	2.0882	0.92027
0.43	1.7347	2.0397	1.4307	2.0397	0.92142

Table 4.2: Isothermal Flow k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{T_0{}^*}$
0.44	1.5937	1.9933	1.4059	1.9933	0.92259
0.45	1.4640	1.9490	1.3824	1.9490	0.92378
0.46	1.3446	1.9066	1.3601	1.9066	0.92501
0.47	1.2346	1.8661	1.3390	1.8661	0.92626
0.48	1.1331	1.8272	1.3189	1.8272	0.92754
0.49	1.0395	1.7899	1.2999	1.7899	0.92884
0.50	0.95299	1.7541	1.2818	1.7541	0.93017
0.51	0.87312	1.7197	1.2647	1.7197	0.93153
0.52	0.79930	1.6867	1.2484	1.6867	0.93292
0.53	0.73106	1.6548	1.2329	1.6548	0.93433
0.54	0.66796	1.6242	1.2181	1.6242	0.93577
0.55	0.60960	1.5947	1.2041	1.5947	0.93723
0.56	0.55563	1.5662	1.1908	1.5662	0.93873
0.57	0.50572	1.5387	1.1781	1.5387	0.94025
0.58	0.45956	1.5122	1.1661	1.5122	0.94179
0.59	0.41690	1.4865	1.1547	1.4865	0.94337
0.60	0.37747	1.4618	1.1438	1.4618	0.94497
0.61	0.34104	1.4378	1.1335	1.4378	0.94659
0.62	0.30741	1.4146	1.1236	1.4146	0.94825
0.63	0.27639	1.3922	1.1143	1.3922	0.94993
0.64	0.24779	1.3704	1.1055	1.3704	0.95164
0.65	0.22146	1.3493	1.0971	1.3493	0.95337
0.66	0.19724	1.3289	1.0892	1.3289	0.95513
0.67	0.17500	1.3090	1.0816	1.3090	0.95692
0.68	0.15460	1.2898	1.0745	1.2898	0.95874
0.69	0.13593	1.2711	1.0678	1.2711	0.96058
0.70	0.11887	1.2529	1.0614	1.2529	0.96245
0.71	0.10333	1.2353	1.0555	1.2353	0.96434
0.72	0.08921	1.2181	1.0498	1.2181	0.96627
0.73	0.07642	1.2014	1.0445	1.2014	0.96822
0.74	0.06489	1.1852	1.0396	1.1852	0.97019
0.75	0.05452	1.1694	1.0349	1.1694	0.97220
0.76	0.04526	1.1540	1.0306	1.1540	0.97423

Table 4.2: Isothermal Flow k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{{T_0}^*}$
0.77	0.03704	1.1390	1.0265	1.1390	0.97629
0.78	0.02979	1.1244	1.0228	1.1244	0.97837
0.79	0.02346	1.1102	1.0193	1.1102	0.98048
0.80	0.01800	1.0963	1.0161	1.0963	0.98262
0.81	0.01335	1.0828	1.0132	1.0828	0.98479
0.81745	0.01039	1.0729	1.0112	1.0729	0.98642
0.82490	0.00783	1.063	1.009	1.063	0.98806
0.83235	0.00567	1.054	1.008	1.054	0.98972
0.8398	0.00388	1.044	1.006	1.044	0.9914
0.84725	0.00245	1.035	1.005	1.035	0.99309
0.85471	0.00136	1.026	1.003	1.026	0.99479
0.86216	0.000594	1.017	1.002	1.017	0.99651
0.86961	0.000146	1.009	1.001	1.009	0.99825
0.87706	0	1	1	1	1

4.3 Isothermal Flow k=1.4

Table 4.3: Isothermal Flow k=1.4

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{{T_0}^*}$
0.01	7132.98	84.5154	52.9657	84.5154	0.87502
0.02	1777.23	42.2577	26.4884	42.2577	0.87507
0.03	785.97	28.1718	17.6651	28.1718	0.87516
0.04	439.33	21.1289	13.2553	21.1289	0.87528
0.05	279.06	16.9031	10.6109	16.9031	0.87544
0.06	192.12	14.0859	8.8493	14.0859	0.87563
0.07	139.79	12.0736	7.5920	12.0736	0.87586
0.08	105.89	10.5644	6.6500	10.5644	0.87612
0.09	82.7040	9.3906	5.9181	9.3906	0.87642
0.10	66.1599	8.4515	5.3334	8.4515	0.87675
0.11	53.9538	7.6832	4.8556	7.6832	0.87712
0.12	44.6991	7.0430	4.4581	7.0430	0.87752

Table 4.3: Isothermal Flow k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{{T_0}^*}$
0.13	37.5215	6.5012	4.1224	6.5012	0.87796
0.14	31.8474	6.0368	3.8352	6.0368	0.87843
0.15	27.2883	5.6344	3.5867	5.6344	0.87894
0.16	23.5731	5.2822	3.3698	5.2822	0.87948
0.17	20.5083	4.9715	3.1789	4.9715	0.88006
0.18	17.9527	4.6953	3.0096	4.6953	0.88067
0.19	15.8013	4.4482	2.8585	4.4482	0.88132
0.20	13.9747	4.2258	2.7230	4.2258	0.88200
0.21	12.4121	4.0245	2.6007	4.0245	0.88272
0.22	11.0662	3.8416	2.4899	3.8416	0.88347
0.23	9.8997	3.6746	2.3891	3.6746	0.88426
0.24	8.8830	3.5215	2.2970	3.5215	0.88508
0.25	7.9925	3.3806	2.2126	3.3806	0.88594
0.26	7.2087	3.2506	2.1350	3.2506	0.88683
0.27	6.5160	3.1302	2.0635	3.1302	0.88776
0.28	5.9013	3.0184	1.9974	3.0184	0.88872
0.29	5.3540	2.9143	1.9361	2.9143	0.88972
0.30	4.8650	2.8172	1.8791	2.8172	0.89075
0.31	4.4268	2.7263	1.8262	2.7263	0.89182
0.32	4.0331	2.6411	1.7768	2.6411	0.89292
0.33	3.6782	2.5611	1.7306	2.5611	0.89406
0.34	3.3578	2.4857	1.6874	2.4857	0.89523
0.35	3.0677	2.4147	1.6470	2.4147	0.89644
0.36	2.8046	2.3477	1.6090	2.3477	0.89768
0.37	2.5655	2.2842	1.5733	2.2842	0.89896
0.38	2.3479	2.2241	1.5398	2.2241	0.90027
0.39	2.1494	2.1671	1.5082	2.1671	0.90162
0.40	1.9682	2.1129	1.4784	2.1129	0.90300
0.41	1.8024	2.0614	1.4503	2.0614	0.90442
0.42	1.6507	2.0123	1.4237	2.0123	0.90587
0.43	1.5116	1.9655	1.3986	1.9655	0.90736
0.44	1.3840	1.9208	1.3749	1.9208	0.90888
0.45	1.2668	1.8781	1.3524	1.8781	0.91044

Table 4.3: Isothermal Flow k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{T_0{}^*}$
0.46	1.1591	1.8373	1.3311	1.8373	0.91203
0.47	1.0600	1.7982	1.3109	1.7982	0.91366
0.48	0.96873	1.7607	1.2918	1.7607	0.91532
0.49	0.88472	1.7248	1.2737	1.7248	0.91702
0.50	0.80732	1.6903	1.2565	1.6903	0.91875
0.51	0.73598	1.6572	1.2402	1.6572	0.92052
0.52	0.67021	1.6253	1.2247	1.6253	0.92232
0.53	0.60956	1.5946	1.2100	1.5946	0.92416
0.54	0.55364	1.5651	1.1960	1.5651	0.92603
0.55	0.50207	1.5366	1.1827	1.5366	0.92794
0.56	0.45453	1.5092	1.1702	1.5092	0.92988
0.57	0.41071	1.4827	1.1582	1.4827	0.93186
0.58	0.37034	1.4572	1.1469	1.4572	0.93387
0.59	0.33316	1.4325	1.1361	1.4325	0.93592
0.60	0.29895	1.4086	1.1259	1.4086	0.93800
0.61	0.26749	1.3855	1.1162	1.3855	0.94012
0.62	0.23858	1.3632	1.1070	1.3632	0.94227
0.63	0.21206	1.3415	1.0983	1.3415	0.94446
0.64	0.18776	1.3206	1.0901	1.3206	0.94668
0.65	0.16552	1.3002	1.0823	1.3002	0.94894
0.66	0.14522	1.2805	1.0750	1.2805	0.95123
0.67	0.12671	1.2614	1.0680	1.2614	0.95356
0.68	0.10988	1.2429	1.0615	1.2429	0.95592
0.69	0.09463	1.2249	1.0553	1.2249	0.95832
0.70	0.08085	1.2074	1.0495	1.2074	0.96075
0.71	0.06844	1.1904	1.0440	1.1904	0.96322
0.72	0.05733	1.1738	1.0389	1.1738	0.96572
0.73	0.04743	1.1577	1.0341	1.1577	0.96826
0.74	0.03866	1.1421	1.0297	1.1421	0.97083
0.75	0.03095	1.1269	1.0255	1.1269	0.97344
0.76	0.02424	1.1120	1.0217	1.1120	0.97608
0.77	0.01847	1.0976	1.0181	1.0976	0.97876
0.78	0.01359	1.0835	1.0149	1.0835	0.98147

Table 4.3: Isothermal Flow k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{T_0{}^*}$
0.79	0.00953	1.07	1.012	1.07	0.98422
0.8	0.00626	1.056	1.009	1.056	0.987
0.81	0.00371	1.043	1.007	1.043	0.98982
0.81391	0.00291	1.038	1.006	1.038	0.99093
0.81781	0.00221	1.033	1.005	1.033	0.99204
0.82172	0.00161	1.029	1.004	1.029	0.99316
0.82562	0.00111	1.024	1.003	1.024	0.99429
0.82953	0.000705	1.019	1.003	1.019	0.99542
0.83344	0.000394	1.014	1.002	1.014	0.99656
0.83734	0.000174	1.009	1.001	1.009	0.9977
0.84125	$4.31E{-5}$	1.005	1.001	1.005	0.99885
0.84515	0	1	1	1	1

4.4 Isothermal Flow k=1.67

Table 4.4: Isothermal Flow k=1.67

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{T_0{}^*}$
0.01	5978.33	77.3823	49.0654	77.3823	0.83295
0.02	1488.69	38.6912	24.5389	38.6912	0.83303
0.03	657.84	25.7941	16.3661	25.7941	0.83317
0.04	367.33	19.3456	12.2817	19.3456	0.83336
0.05	233.04	15.4765	9.8328	15.4765	0.83362
0.06	160.22	12.8971	8.2015	12.8971	0.83392
0.07	116.40	11.0546	7.0375	11.0546	0.83428
0.08	88.0242	9.6728	6.1655	9.6728	0.83470
0.09	68.6232	8.5980	5.4882	8.5980	0.83518
0.10	54.7879	7.7382	4.9472	7.7382	0.83571
0.11	44.5861	7.0348	4.5053	7.0348	0.83629
0.12	36.8558	6.4485	4.1378	6.4485	0.83694
0.13	30.8645	5.9525	3.8274	5.9525	0.83763
0.14	26.1317	5.5273	3.5620	5.5273	0.83839

Table 4.4: Isothermal Flow k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{{T_0}^*}$
0.15	22.3320	5.1588	3.3326	5.1588	0.83920
0.16	19.2384	4.8364	3.1323	4.8364	0.84006
0.17	16.6887	4.5519	2.9561	4.5519	0.84098
0.18	14.5648	4.2990	2.8000	4.2990	0.84196
0.19	12.7787	4.0728	2.6607	4.0728	0.84299
0.20	11.2640	3.8691	2.5358	3.8691	0.84408
0.21	9.9698	3.6849	2.4232	3.6849	0.84522
0.22	8.8565	3.5174	2.3213	3.5174	0.84642
0.23	7.8930	3.3644	2.2286	3.3644	0.84768
0.24	7.0545	3.2243	2.1440	3.2243	0.84899
0.25	6.3211	3.0953	2.0665	3.0953	0.85036
0.26	5.6767	2.9762	1.9953	2.9762	0.85178
0.27	5.1082	2.8660	1.9297	2.8660	0.85326
0.28	4.6047	2.7637	1.8692	2.7637	0.85479
0.29	4.1572	2.6684	1.8131	2.6684	0.85638
0.30	3.7582	2.5794	1.7611	2.5794	0.85803
0.31	3.4015	2.4962	1.7127	2.4962	0.85973
0.32	3.0816	2.4182	1.6676	2.4182	0.86149
0.33	2.7941	2.3449	1.6256	2.3449	0.86330
0.34	2.5352	2.2760	1.5863	2.2760	0.86517
0.35	2.3014	2.2109	1.5496	2.2109	0.86710
0.36	2.0899	2.1495	1.5151	2.1495	0.86908
0.37	1.8983	2.0914	1.4828	2.0914	0.87112
0.38	1.7245	2.0364	1.4524	2.0364	0.87321
0.39	1.5665	1.9842	1.4239	1.9842	0.87536
0.40	1.4228	1.9346	1.3970	1.9346	0.87756
0.41	1.2918	1.8874	1.3717	1.8874	0.87982
0.42	1.1724	1.8424	1.3478	1.8424	0.88214
0.43	1.0634	1.7996	1.3253	1.7996	0.88451
0.44	0.96385	1.7587	1.3041	1.7587	0.88694
0.45	0.87286	1.7196	1.2840	1.7196	0.88942
0.46	0.78965	1.6822	1.2651	1.6822	0.89196
0.47	0.71352	1.6464	1.2472	1.6464	0.89455

Table 4.4: Isothermal Flow k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{T_0}{T_0{}^*}$
0.48	0.64385	1.6121	1.2302	1.6121	0.89721
0.49	0.58009	1.5792	1.2142	1.5792	0.89991
0.50	0.52174	1.5476	1.1990	1.5476	0.90267
0.51	0.46834	1.5173	1.1847	1.5173	0.90549
0.52	0.41948	1.4881	1.1711	1.4881	0.90837
0.53	0.37480	1.4600	1.1583	1.4600	0.91130
0.54	0.33396	1.4330	1.1461	1.4330	0.91428
0.55	0.29666	1.4070	1.1347	1.4070	0.91732
0.56	0.26263	1.3818	1.1238	1.3818	0.92042
0.57	0.23162	1.3576	1.1135	1.3576	0.92357
0.58	0.20340	1.3342	1.1038	1.3342	0.92678
0.59	0.17776	1.3116	1.0947	1.3116	0.93005
0.60	0.15451	1.2897	1.0860	1.2897	0.93337
0.61	0.13348	1.2686	1.0779	1.2686	0.93674
0.62	0.11451	1.2481	1.0702	1.2481	0.94018
0.63	0.09745	1.2283	1.0630	1.2283	0.94366
0.64	0.08217	1.2091	1.0562	1.2091	0.94721
0.65	0.06854	1.1905	1.0498	1.1905	0.95081
0.66	0.05645	1.1725	1.0439	1.1725	0.95446
0.67	0.04580	1.1550	1.0383	1.1550	0.95817
0.68	0.03649	1.1380	1.0331	1.1380	0.96194
0.69	0.02842	1.1215	1.0282	1.1215	0.96576
0.70	0.02152	1.1055	1.0237	1.1055	0.96964
0.71	0.01571	1.0899	1.0195	1.0899	0.97358
0.71709	0.01221	1.0791	1.0167	1.0791	0.97640
0.72418	0.00919	1.069	1.014	1.069	0.97925
0.73127	0.00665	1.058	1.012	1.058	0.98213
0.73837	0.00454	1.048	1.009	1.048	0.98504
0.74546	0.00286	1.038	1.007	1.038	0.98798
0.75255	0.00158	1.028	1.005	1.028	0.99094
0.75964	0.000693	1.019	1.003	1.019	0.99393
0.76673	0.000171	1.009	1.002	1.009	0.99695
0.77382	0	1	1	1	1

4.5 Unchoked Isothermal Flow k=1.4

Table 4.5: The flow parameters for unchoked flow

$\mathbf{M_1}$	$\mathbf{M_2}$	$\left.\frac{\mathbf{4fL_{max}}}{\mathbf{D}}\right\|_{\mathbf{1}}$	$\frac{\mathbf{4fL}}{\mathbf{D}}$	$\frac{\mathbf{P_2}}{\mathbf{P_1}}$
0.7272	0.84095	0.05005	0.05000	0.10000
0.6934	0.83997	0.08978	0.08971	0.10000
0.6684	0.84018	0.12949	0.12942	0.10000
0.6483	0.83920	0.16922	0.16912	0.10000
0.5914	0.83889	0.32807	0.32795	0.10000
0.5807	0.83827	0.36780	0.36766	0.10000
0.5708	0.83740	0.40754	0.40737	0.10000

Chapter 5

Fanno Flow

5.1 Standard Fanno Flow Table for k=1.2

Table 5.1: Fanno Flow Standard Basic Table k=1.2

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.01	8324.14	104.88	59.2058	95.3467	0.01049	1.1000
0.02	2075.42	52.4394	29.6078	47.6741	0.02098	1.1000
0.03	918.75	34.9587	19.7439	31.7835	0.03146	1.0999
0.04	514.19	26.2181	14.8137	23.8385	0.04195	1.0998
0.05	327.09	20.9736	11.8568	19.0716	0.05243	1.0997
0.06	225.58	17.4770	9.8866	15.8939	0.06292	1.0996
0.07	164.45	14.9793	8.4803	13.6242	0.07340	1.0995
0.08	124.83	13.1059	7.4264	11.9221	0.08388	1.0993
0.09	97.7194	11.6487	6.6074	10.5983	0.09435	1.0991
0.10	78.3650	10.4828	5.9529	9.5394	0.10483	1.0989
0.11	64.0768	9.5289	5.4180	8.6731	0.11530	1.0987
0.12	53.2359	8.7338	4.9727	7.9512	0.12577	1.0984
0.13	44.8217	8.0610	4.5965	7.3405	0.13623	1.0981
0.14	38.1647	7.4842	4.2745	6.8171	0.14669	1.0978
0.15	32.8110	6.9842	3.9959	6.3636	0.15714	1.0975
0.16	28.4440	6.5467	3.7526	5.9668	0.16760	1.0972
0.17	24.8379	6.1606	3.5382	5.6167	0.17804	1.0968
0.18	21.8274	5.8173	3.3481	5.3056	0.18848	1.0964

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.19	19.2901	5.5101	3.1783	5.0273	0.19891	1.0960
0.20	17.1331	5.2336	3.0258	4.7768	0.20934	1.0956
0.21	15.2853	4.9834	2.8882	4.5503	0.21977	1.0952
0.22	13.6913	4.7558	2.7634	4.3444	0.23018	1.0947
0.23	12.3078	4.5480	2.6498	4.1564	0.24059	1.0942
0.24	11.1000	4.3575	2.5459	3.9842	0.25099	1.0937
0.25	10.0401	4.1822	2.4507	3.8258	0.26139	1.0932
0.26	9.1056	4.0203	2.3630	3.6795	0.27177	1.0926
0.27	8.2781	3.8704	2.2821	3.5442	0.28215	1.0920
0.28	7.5424	3.7311	2.2072	3.4185	0.29252	1.0914
0.29	6.8858	3.6015	2.1377	3.3016	0.30288	1.0908
0.30	6.2978	3.4804	2.0731	3.1925	0.31324	1.0902
0.31	5.7696	3.3671	2.0129	3.0904	0.32358	1.0895
0.32	5.2938	3.2609	1.9567	2.9948	0.33391	1.0889
0.33	4.8638	3.1610	1.9041	2.9050	0.34424	1.0882
0.34	4.4744	3.0671	1.8549	2.8205	0.35455	1.0874
0.35	4.1209	2.9784	1.8087	2.7408	0.36486	1.0867
0.36	3.7992	2.8947	1.7652	2.6656	0.37515	1.0859
0.37	3.5059	2.8154	1.7243	2.5945	0.38543	1.0851
0.38	3.2380	2.7403	1.6858	2.5272	0.39570	1.0843
0.39	2.9928	2.6690	1.6494	2.4633	0.40596	1.0835
0.40	2.7680	2.6013	1.6151	2.4027	0.41621	1.0827
0.41	2.5615	2.5368	1.5826	2.3450	0.42644	1.0818
0.42	2.3717	2.4754	1.5519	2.2901	0.43667	1.0809
0.43	2.1969	2.4168	1.5228	2.2378	0.44688	1.0800
0.44	2.0357	2.3609	1.4952	2.1878	0.45707	1.0791
0.45	1.8870	2.3074	1.4690	2.1402	0.46726	1.0782
0.46	1.7495	2.2563	1.4441	2.0946	0.47743	1.0772
0.47	1.6222	2.2073	1.4205	2.0509	0.48758	1.0762
0.48	1.5044	2.1603	1.3980	2.0091	0.49773	1.0752
0.49	1.3953	2.1152	1.3766	1.9691	0.50786	1.0742
0.50	1.2940	2.0719	1.3563	1.9306	0.51797	1.0732

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.51	1.1999	2.0303	1.3369	1.8937	0.52807	1.0721
0.52	1.1126	1.9902	1.3185	1.8582	0.53815	1.0710
0.53	1.0314	1.9517	1.3009	1.8241	0.54822	1.0699
0.54	0.95581	1.9145	1.2841	1.7912	0.55828	1.0688
0.55	0.88550	1.8787	1.2681	1.7596	0.56831	1.0677
0.56	0.82004	1.8442	1.2529	1.7291	0.57833	1.0666
0.57	0.75907	1.8108	1.2383	1.6997	0.58834	1.0654
0.58	0.70225	1.7786	1.2245	1.6713	0.59833	1.0642
0.59	0.64929	1.7475	1.2112	1.6439	0.60830	1.0630
0.60	0.59992	1.7174	1.1986	1.6175	0.61826	1.0618
0.61	0.55388	1.6882	1.1865	1.5919	0.62819	1.0605
0.62	0.51094	1.6600	1.1750	1.5671	0.63811	1.0593
0.63	0.47090	1.6327	1.1640	1.5432	0.64801	1.0580
0.64	0.43355	1.6062	1.1536	1.5200	0.65790	1.0567
0.65	0.39872	1.5805	1.1436	1.4975	0.66777	1.0554
0.66	0.36624	1.5556	1.1341	1.4758	0.67761	1.0541
0.67	0.33596	1.5314	1.1250	1.4547	0.68744	1.0527
0.68	0.30774	1.5079	1.1164	1.4342	0.69725	1.0514
0.69	0.28145	1.4851	1.1081	1.4143	0.70704	1.0500
0.70	0.25696	1.4629	1.1003	1.3951	0.71681	1.0486
0.71	0.23416	1.4413	1.0928	1.3763	0.72657	1.0472
0.72	0.21296	1.4203	1.0858	1.3581	0.73630	1.0458
0.73	0.19324	1.3999	1.0790	1.3405	0.74601	1.0443
0.74	0.17493	1.3800	1.0726	1.3233	0.75570	1.0429
0.75	0.15793	1.3607	1.0666	1.3065	0.76537	1.0414
0.76	0.14218	1.3418	1.0609	1.2903	0.77503	1.0399
0.77	0.12759	1.3234	1.0554	1.2744	0.78466	1.0384
0.78	0.11410	1.3055	1.0503	1.2590	0.79427	1.0369
0.79	0.10164	1.2880	1.0455	1.2440	0.80385	1.0354
0.80	0.09016	1.2710	1.0409	1.2294	0.81342	1.0338
0.81	0.07959	1.2543	1.0367	1.2151	0.82297	1.0323
0.82	0.06990	1.2381	1.0327	1.2012	0.83249	1.0307

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.83	0.06102	1.2222	1.0289	1.1877	0.84199	1.0291
0.84	0.05291	1.2067	1.0255	1.1744	0.85147	1.0275
0.85	0.04554	1.1916	1.0222	1.1615	0.86093	1.0259
0.86	0.03885	1.1768	1.0192	1.1489	0.87036	1.0242
0.87	0.03282	1.1623	1.0165	1.1367	0.87978	1.0226
0.88	0.02740	1.1482	1.0140	1.1247	0.88917	1.0209
0.89	0.02257	1.1344	1.0117	1.1129	0.89853	1.0193
0.90	0.01828	1.1208	1.0096	1.1015	0.90787	1.0176
0.91	0.01452	1.1076	1.0077	1.0903	0.91719	1.0159
0.92	0.01125	1.0946	1.0061	1.0793	0.92649	1.0142
0.93	0.00845	1.082	1.005	1.069	0.93576	1.012
0.94	0.00609	1.07	1.003	1.058	0.94501	1.011
0.95	0.00415	1.057	1.002	1.048	0.95424	1.009
0.96	0.00261	1.045	1.001	1.038	0.96344	1.007
0.97	0.00144	1.034	1.001	1.028	0.97262	1.005
0.98	0.000628	1.022	1	1.019	0.98177	1.004
0.99	0.000154	1.011	1	1.009	0.9909	1.002
1	0	1	1	1	1	1
1.01	0.000149	0.9892	1	0.991	1.009	0.99818
1.02	0.000585	0.9786	1	0.98219	1.018	0.99634
1.03	0.00129	0.9682	1.001	0.97356	1.027	0.99449
1.04	0.00226	0.95799	1.001	0.9651	1.036	0.99264
1.05	0.00347	0.94797	1.002	0.95681	1.045	0.99077
1.06	0.00491	0.93814	1.003	0.94868	1.054	0.98889
1.07	0.00658	0.92848	1.004	0.94071	1.063	0.987
1.08	0.00845	0.919	1.006	0.9329	1.072	0.9851
1.09	0.010517	0.90969	1.007	0.92524	1.081	0.98319
1.1	0.012772	0.90054	1.009	0.91773	1.09	0.98127
1.11	0.015205	0.89154	1.011	0.91036	1.098	0.97934
1.12	0.017806	0.88271	1.013	0.90312	1.107	0.9774
1.13	0.020565	0.87402	1.015	0.89602	1.116	0.97545
1.14	0.023475	0.86549	1.017	0.88906	1.125	0.97349

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
1.15	0.026528	0.85709	1.019	0.88222	1.134	0.97152
1.16	0.029716	0.84884	1.022	0.87551	1.142	0.96954
1.17	0.033031	0.84072	1.025	0.86891	1.151	0.96755
1.18	0.036467	0.83273	1.028	0.86244	1.159	0.96556
1.19	0.040016	0.82488	1.031	0.85608	1.168	0.96355
1.2	0.043674	0.81715	1.034	0.84984	1.177	0.96154
1.21	0.047434	0.80954	1.037	0.8437	1.185	0.95952
1.22	0.05129	0.80206	1.041	0.83767	1.194	0.95749
1.23	0.055236	0.79469	1.045	0.83175	1.202	0.95545
1.24	0.059268	0.78744	1.048	0.82592	1.211	0.9534
1.25	0.063381	0.7803	1.052	0.8202	1.219	0.95135
1.26	0.067569	0.77327	1.057	0.81457	1.228	0.94929
1.27	0.071829	0.76634	1.061	0.80904	1.236	0.94722
1.28	0.076156	0.75952	1.065	0.8036	1.244	0.94515
1.29	0.080546	0.7528	1.07	0.79825	1.253	0.94306
1.3	0.084996	0.74618	1.075	0.79299	1.261	0.94098
1.31	0.089501	0.73966	1.08	0.78781	1.269	0.93888
1.32	0.094057	0.73324	1.085	0.78272	1.278	0.93678
1.33	0.098663	0.7269	1.09	0.77771	1.286	0.93467
1.34	0.10331	0.72066	1.096	0.77279	1.294	0.93255
1.35	0.10801	0.71451	1.101	0.76794	1.302	0.93043
1.36	0.11274	0.70844	1.107	0.76316	1.31	0.9283
1.37	0.11751	0.70246	1.113	0.75846	1.318	0.92617
1.38	0.12231	0.69657	1.119	0.75384	1.327	0.92403
1.39	0.12714	0.69075	1.125	0.74929	1.335	0.92188
1.4	0.132	0.68502	1.132	0.7448	1.343	0.91973
1.41	0.13689	0.67936	1.138	0.74039	1.351	0.91758
1.42	0.1418	0.67378	1.145	0.73604	1.359	0.91542
1.43	0.14674	0.66828	1.152	0.73176	1.367	0.91325
1.44	0.15169	0.66285	1.159	0.72754	1.374	0.91108
1.45	0.15666	0.65749	1.166	0.72339	1.382	0.9089
1.46	0.16165	0.65221	1.174	0.7193	1.39	0.90672

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
1.47	0.16665	0.64699	1.181	0.71527	1.398	0.90454
1.48	0.17167	0.64184	1.189	0.7113	1.406	0.90235
1.49	0.17669	0.63676	1.197	0.70738	1.414	0.90016
1.5	0.18173	0.63174	1.205	0.70353	1.421	0.89796
1.51	0.18677	0.62678	1.213	0.69973	1.429	0.89576
1.52	0.19182	0.62189	1.222	0.69598	1.437	0.89355
1.53	0.19687	0.61707	1.23	0.69229	1.444	0.89135
1.54	0.20193	0.6123	1.239	0.68865	1.452	0.88913
1.55	0.20699	0.60759	1.248	0.68506	1.46	0.88692
1.56	0.21205	0.60294	1.257	0.68152	1.467	0.8847
1.57	0.21712	0.59835	1.267	0.67803	1.475	0.88248
1.58	0.22218	0.59381	1.276	0.67459	1.482	0.88025
1.59	0.22724	0.58933	1.286	0.6712	1.49	0.87803
1.6	0.23229	0.5849	1.296	0.66785	1.497	0.8758
1.61	0.23734	0.58053	1.306	0.66455	1.505	0.87356
1.62	0.24239	0.5762	1.317	0.66129	1.512	0.87133
1.63	0.24743	0.57193	1.327	0.65808	1.52	0.86909
1.64	0.25246	0.56771	1.338	0.65491	1.527	0.86685
1.65	0.25749	0.56354	1.349	0.65179	1.534	0.86461
1.66	0.26251	0.55942	1.36	0.6487	1.542	0.86237
1.67	0.26752	0.55535	1.372	0.64566	1.549	0.86012
1.68	0.27252	0.55132	1.383	0.64266	1.556	0.85787
1.69	0.27751	0.54734	1.395	0.63969	1.563	0.85562
1.7	0.28249	0.5434	1.407	0.63677	1.57	0.85337
1.71	0.28746	0.53951	1.419	0.63388	1.578	0.85112
1.72	0.29242	0.53566	1.432	0.63103	1.585	0.84887
1.73	0.29736	0.53186	1.444	0.62822	1.592	0.84662
1.74	0.30229	0.5281	1.457	0.62544	1.599	0.84436
1.75	0.30721	0.52438	1.47	0.6227	1.606	0.84211
1.76	0.31211	0.5207	1.484	0.61999	1.613	0.83985
1.77	0.317	0.51706	1.497	0.61732	1.62	0.83759
1.78	0.32187	0.51346	1.511	0.61468	1.627	0.83533

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
1.79	0.32673	0.5099	1.525	0.61208	1.634	0.83307
1.8	0.33158	0.50638	1.54	0.6095	1.641	0.83082
1.81	0.3364	0.5029	1.554	0.60696	1.648	0.82856
1.82	0.34121	0.49946	1.569	0.60445	1.654	0.8263
1.83	0.34601	0.49605	1.584	0.60197	1.661	0.82404
1.84	0.35078	0.49267	1.6	0.59952	1.668	0.82178
1.85	0.35554	0.48934	1.615	0.5971	1.675	0.81952
1.86	0.36028	0.48603	1.631	0.59471	1.681	0.81726
1.87	0.36501	0.48277	1.647	0.59235	1.688	0.815
1.88	0.36972	0.47953	1.664	0.59002	1.695	0.81274
1.89	0.3744	0.47633	1.68	0.58771	1.702	0.81049
1.9	0.37907	0.47317	1.697	0.58544	1.708	0.80823
1.91	0.38372	0.47003	1.715	0.58319	1.715	0.80597
1.92	0.38835	0.46693	1.732	0.58096	1.721	0.80372
1.93	0.39297	0.46386	1.75	0.57876	1.728	0.80146
1.94	0.39756	0.46082	1.768	0.57659	1.734	0.79921
1.95	0.40213	0.45781	1.787	0.57444	1.741	0.79696
1.96	0.40669	0.45483	1.806	0.57232	1.747	0.79471
1.97	0.41122	0.45188	1.825	0.57022	1.754	0.79246
1.98	0.41574	0.44896	1.844	0.56815	1.76	0.79021
1.99	0.42023	0.44607	1.864	0.5661	1.766	0.78796
2	0.4247	0.4432	1.884	0.56408	1.773	0.78571
2.01	0.42916	0.44037	1.904	0.56207	1.779	0.78347
2.02	0.43359	0.43756	1.925	0.56009	1.785	0.78123
2.03	0.43801	0.43478	1.946	0.55813	1.792	0.77899
2.04	0.4424	0.43203	1.967	0.5562	1.798	0.77675
2.05	0.44677	0.4293	1.989	0.55428	1.804	0.77451
2.06	0.45112	0.4266	2.011	0.55239	1.81	0.77228
2.07	0.45546	0.42392	2.033	0.55052	1.816	0.77004
2.08	0.45977	0.42127	2.056	0.54867	1.823	0.76781
2.09	0.46406	0.41865	2.079	0.54684	1.829	0.76558
2.1	0.46832	0.41605	2.103	0.54502	1.835	0.76336

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
2.11	0.47257	0.41347	2.127	0.54323	1.841	0.76114
2.12	0.4768	0.41092	2.151	0.54146	1.847	0.75891
2.13	0.48101	0.4084	2.175	0.53971	1.853	0.7567
2.14	0.48519	0.40589	2.201	0.53798	1.859	0.75448
2.15	0.48936	0.40341	2.226	0.53626	1.865	0.75227
2.16	0.4935	0.40095	2.252	0.53456	1.871	0.75005
2.17	0.49763	0.39852	2.278	0.53289	1.877	0.74785
2.18	0.50173	0.3961	2.305	0.53122	1.882	0.74564
2.19	0.50581	0.39371	2.332	0.52958	1.888	0.74344
2.2	0.50987	0.39134	2.359	0.52796	1.894	0.74124
2.21	0.51391	0.38899	2.387	0.52635	1.9	0.73904
2.22	0.51793	0.38667	2.416	0.52476	1.906	0.73685
2.23	0.52193	0.38436	2.445	0.52318	1.911	0.73466
2.24	0.5259	0.38207	2.474	0.52162	1.917	0.73247
2.25	0.52986	0.37981	2.504	0.52008	1.923	0.73029
2.26	0.5338	0.37756	2.534	0.51855	1.928	0.72811
2.27	0.53771	0.37534	2.565	0.51704	1.934	0.72593
2.28	0.54161	0.37313	2.596	0.51555	1.94	0.72376
2.29	0.54548	0.37095	2.628	0.51407	1.945	0.72159
2.3	0.54933	0.36878	2.66	0.5126	1.951	0.71942
2.31	0.55317	0.36663	2.693	0.51115	1.956	0.71726
2.32	0.55698	0.3645	2.726	0.50972	1.962	0.7151
2.33	0.56077	0.36239	2.759	0.50829	1.967	0.71295
2.34	0.56455	0.36029	2.794	0.50689	1.973	0.7108
2.35	0.5683	0.35822	2.829	0.50549	1.978	0.70865
2.36	0.57203	0.35616	2.864	0.50412	1.984	0.7065
2.37	0.57574	0.35412	2.9	0.50275	1.989	0.70437
2.38	0.57943	0.3521	2.936	0.5014	1.994	0.70223
2.39	0.5831	0.35009	2.973	0.50006	2	0.7001
2.4	0.58675	0.3481	3.011	0.49874	2.005	0.69797
2.41	0.59039	0.34613	3.049	0.49742	2.01	0.69585
2.42	0.594	0.34417	3.088	0.49612	2.016	0.69373

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
2.43	0.59759	0.34224	3.127	0.49484	2.021	0.69161
2.44	0.60116	0.34031	3.167	0.49356	2.026	0.6895
2.45	0.60471	0.3384	3.208	0.4923	2.031	0.68739
2.46	0.60825	0.33651	3.249	0.49105	2.036	0.68529
2.47	0.61176	0.33464	3.291	0.48981	2.042	0.68319
2.48	0.61525	0.33278	3.333	0.48859	2.047	0.6811
2.49	0.61873	0.33093	3.377	0.48737	2.052	0.67901
2.5	0.62219	0.3291	3.421	0.48617	2.057	0.67692
2.51	0.62562	0.32729	3.465	0.48498	2.062	0.67484
2.52	0.62904	0.32549	3.51	0.4838	2.067	0.67277
2.53	0.63244	0.3237	3.556	0.48263	2.072	0.67069
2.54	0.63582	0.32193	3.603	0.48148	2.077	0.66863
2.55	0.63918	0.32017	3.65	0.48033	2.082	0.66657
2.56	0.64252	0.31843	3.698	0.47919	2.087	0.66451
2.57	0.64584	0.3167	3.747	0.47807	2.092	0.66246
2.58	0.64915	0.31498	3.797	0.47695	2.097	0.66041
2.59	0.65244	0.31328	3.847	0.47585	2.102	0.65836
2.6	0.6557	0.31159	3.898	0.47475	2.106	0.65632
2.61	0.65895	0.30992	3.95	0.47367	2.111	0.65429
2.62	0.66219	0.30825	4.003	0.47259	2.116	0.65226
2.63	0.6654	0.30661	4.056	0.47153	2.121	0.65024
2.64	0.66859	0.30497	4.111	0.47047	2.126	0.64822
2.65	0.67177	0.30335	4.166	0.46943	2.13	0.6462
2.66	0.67493	0.30174	4.222	0.46839	2.135	0.64419
2.67	0.67807	0.30014	4.279	0.46737	2.14	0.64219
2.68	0.6812	0.29855	4.337	0.46635	2.144	0.64019
2.69	0.6843	0.29698	4.395	0.46534	2.149	0.6382
2.7	0.68739	0.29542	4.455	0.46434	2.154	0.63621
2.71	0.69046	0.29387	4.515	0.46335	2.158	0.63422
2.72	0.69352	0.29233	4.577	0.46237	2.163	0.63224
2.73	0.69656	0.2908	4.639	0.4614	2.167	0.63027
2.74	0.69958	0.28929	4.703	0.46043	2.172	0.6283

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
2.75	0.70258	0.28779	4.767	0.45948	2.176	0.62633
2.76	0.70557	0.2863	4.832	0.45853	2.181	0.62438
2.77	0.70854	0.28481	4.898	0.45759	2.185	0.62242
2.78	0.71149	0.28335	4.966	0.45666	2.19	0.62047
2.79	0.71442	0.28189	5.034	0.45574	2.194	0.61853
2.8	0.71734	0.28044	5.103	0.45482	2.199	0.61659
2.81	0.72025	0.279	5.174	0.45392	2.203	0.61466
2.82	0.72313	0.27758	5.245	0.45302	2.207	0.61273
2.83	0.726	0.27616	5.318	0.45213	2.212	0.61081
2.84	0.72886	0.27476	5.392	0.45124	2.216	0.60889
2.85	0.73169	0.27336	5.466	0.45037	2.22	0.60698
2.86	0.73451	0.27198	5.542	0.4495	2.225	0.60507
2.87	0.73732	0.27061	5.619	0.44864	2.229	0.60317
2.88	0.74011	0.26924	5.698	0.44779	2.233	0.60128
2.89	0.74288	0.26789	5.777	0.44694	2.237	0.59939
2.9	0.74564	0.26655	5.858	0.4461	2.242	0.5975
2.91	0.74839	0.26521	5.94	0.44527	2.246	0.59562
2.92	0.75111	0.26389	6.023	0.44444	2.25	0.59375
2.93	0.75382	0.26257	6.107	0.44363	2.254	0.59188
2.94	0.75652	0.26127	6.193	0.44281	2.258	0.59001
2.95	0.7592	0.25997	6.28	0.44201	2.262	0.58816
2.96	0.76187	0.25868	6.368	0.44121	2.266	0.5863
2.97	0.76452	0.25741	6.458	0.44042	2.271	0.58446
2.98	0.76716	0.25614	6.549	0.43964	2.275	0.58261
2.99	0.76978	0.25488	6.642	0.43886	2.279	0.58078
3	0.77238	0.25363	6.735	0.43809	2.283	0.57895
3.01	0.77498	0.25239	6.831	0.43732	2.287	0.57712
3.02	0.77755	0.25115	6.927	0.43656	2.291	0.5753
3.03	0.78011	0.24993	7.025	0.43581	2.295	0.57349
3.04	0.78266	0.24872	7.125	0.43506	2.299	0.57168
3.05	0.7852	0.24751	7.226	0.43432	2.302	0.56987
3.06	0.78772	0.24631	7.329	0.43359	2.306	0.56808

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
3.07	0.79022	0.24512	7.433	0.43286	2.31	0.56628
3.08	0.79271	0.24394	7.539	0.43213	2.314	0.5645
3.09	0.79519	0.24276	7.646	0.43142	2.318	0.56271
3.1	0.79765	0.2416	7.755	0.43071	2.322	0.56094
3.11	0.8001	0.24044	7.866	0.43	2.326	0.55917
3.12	0.80254	0.23929	7.978	0.4293	2.329	0.5574
3.13	0.80496	0.23815	8.092	0.42861	2.333	0.55564
3.14	0.80737	0.23702	8.208	0.42792	2.337	0.55389
3.15	0.80976	0.23589	8.326	0.42723	2.341	0.55214
3.16	0.81215	0.23477	8.445	0.42656	2.344	0.5504
3.17	0.81451	0.23366	8.566	0.42588	2.348	0.54866
3.18	0.81687	0.23256	8.689	0.42521	2.352	0.54693
3.19	0.81921	0.23147	8.814	0.42455	2.355	0.5452
3.2	0.82154	0.23038	8.94	0.4239	2.359	0.54348
3.21	0.82385	0.2293	9.069	0.42324	2.363	0.54176
3.22	0.82616	0.22822	9.199	0.4226	2.366	0.54005
3.23	0.82845	0.22716	9.332	0.42196	2.37	0.53835
3.24	0.83072	0.2261	9.466	0.42132	2.374	0.53665
3.25	0.83299	0.22505	9.602	0.42069	2.377	0.53495
3.26	0.83524	0.224	9.741	0.42006	2.381	0.53327
3.27	0.83748	0.22297	9.881	0.41944	2.384	0.53158
3.28	0.8397	0.22193	10.02	0.41882	2.388	0.52991
3.29	0.84192	0.22091	10.17	0.41821	2.391	0.52823
3.3	0.84412	0.21989	10.32	0.4176	2.395	0.52657
3.31	0.84631	0.21888	10.46	0.417	2.398	0.52491
3.32	0.84849	0.21788	10.62	0.4164	2.402	0.52325
3.33	0.85065	0.21688	10.77	0.4158	2.405	0.5216
3.34	0.85281	0.21589	10.93	0.41521	2.408	0.51996
3.35	0.85495	0.21491	11.08	0.41463	2.412	0.51832
3.36	0.85708	0.21393	11.24	0.41405	2.415	0.51668
3.37	0.85919	0.21296	11.41	0.41347	2.419	0.51506
3.38	0.8613	0.21199	11.57	0.4129	2.422	0.51343

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
3.39	0.86339	0.21104	11.74	0.41233	2.425	0.51182
3.4	0.86548	0.21008	11.91	0.41176	2.429	0.5102
3.41	0.86755	0.20914	12.08	0.41121	2.432	0.5086
3.42	0.86961	0.2082	12.26	0.41065	2.435	0.507
3.43	0.87166	0.20726	12.44	0.4101	2.438	0.5054
3.44	0.87369	0.20634	12.62	0.40955	2.442	0.50381
3.45	0.87572	0.20541	12.8	0.40901	2.445	0.50223
3.46	0.87773	0.2045	12.99	0.40847	2.448	0.50065
3.47	0.87974	0.20359	13.18	0.40793	2.451	0.49907
3.48	0.88173	0.20268	13.37	0.4074	2.455	0.4975
3.49	0.88371	0.20179	13.56	0.40687	2.458	0.49594
3.5	0.88568	0.20089	13.76	0.40635	2.461	0.49438
3.51	0.88764	0.20001	13.96	0.40583	2.464	0.49283
3.52	0.88959	0.19912	14.16	0.40531	2.467	0.49128
3.53	0.89153	0.19825	14.37	0.4048	2.47	0.48974
3.54	0.89346	0.19738	14.58	0.40429	2.473	0.4882
3.55	0.89538	0.19651	14.79	0.40379	2.477	0.48667
3.56	0.89728	0.19565	15.01	0.40329	2.48	0.48515
3.57	0.89918	0.1948	15.22	0.40279	2.483	0.48362
3.58	0.90107	0.19395	15.45	0.40229	2.486	0.48211
3.59	0.90294	0.19311	15.67	0.4018	2.489	0.4806
3.6	0.90481	0.19227	15.9	0.40132	2.492	0.47909
3.61	0.90666	0.19144	16.13	0.40083	2.495	0.47759
3.62	0.90851	0.19061	16.37	0.40035	2.498	0.4761
3.63	0.91035	0.18979	16.6	0.39988	2.501	0.47461
3.64	0.91217	0.18897	16.85	0.3994	2.504	0.47313
3.65	0.91399	0.18816	17.09	0.39893	2.507	0.47165
3.66	0.91579	0.18735	17.34	0.39846	2.51	0.47017
3.67	0.91759	0.18655	17.59	0.398	2.513	0.46871
3.68	0.91938	0.18575	17.85	0.39754	2.515	0.46724
3.69	0.92115	0.18495	18.11	0.39708	2.518	0.46578
3.7	0.92292	0.18417	18.38	0.39663	2.521	0.46433

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
3.71	0.92468	0.18338	18.64	0.39618	2.524	0.46288
3.72	0.92643	0.18261	18.92	0.39573	2.527	0.46144
3.73	0.92817	0.18183	19.19	0.39529	2.53	0.46
3.74	0.9299	0.18106	19.47	0.39484	2.533	0.45857
3.75	0.93162	0.1803	19.76	0.39441	2.535	0.45714
3.76	0.93333	0.17954	20.04	0.39397	2.538	0.45572
3.77	0.93503	0.17879	20.34	0.39354	2.541	0.4543
3.78	0.93672	0.17803	20.63	0.39311	2.544	0.45289
3.79	0.93841	0.17729	20.93	0.39268	2.547	0.45148
3.8	0.94008	0.17655	21.24	0.39226	2.549	0.45008
3.81	0.94175	0.17581	21.55	0.39184	2.552	0.44868
3.82	0.9434	0.17508	21.86	0.39142	2.555	0.44729
3.83	0.94505	0.17435	22.18	0.391	2.558	0.44591
3.84	0.94669	0.17363	22.5	0.39059	2.56	0.44452
3.85	0.94832	0.17291	22.83	0.39018	2.563	0.44315
3.86	0.94994	0.17219	23.16	0.38977	2.566	0.44177
3.87	0.95156	0.17148	23.5	0.38937	2.568	0.44041
3.88	0.95316	0.17077	23.84	0.38897	2.571	0.43904
3.89	0.95476	0.17007	24.19	0.38857	2.574	0.43769
3.9	0.95635	0.16937	24.54	0.38817	2.576	0.43633
3.91	0.95793	0.16868	24.9	0.38778	2.579	0.43499
3.92	0.9595	0.16799	25.26	0.38739	2.581	0.43364
3.93	0.96106	0.1673	25.63	0.387	2.584	0.43231
3.94	0.96261	0.16662	26	0.38661	2.587	0.43097
3.95	0.96416	0.16594	26.38	0.38623	2.589	0.42965
3.96	0.9657	0.16527	26.76	0.38585	2.592	0.42832
3.97	0.96723	0.1646	27.15	0.38547	2.594	0.427
3.98	0.96875	0.16393	27.55	0.3851	2.597	0.42569
3.99	0.97027	0.16327	27.95	0.38472	2.599	0.42438
4	0.97177	0.16261	28.36	0.38435	2.602	0.42308
4.01	0.97327	0.16196	28.77	0.38398	2.604	0.42178
4.02	0.97476	0.16131	29.18	0.38362	2.607	0.42048

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
4.03	0.97624	0.16066	29.61	0.38326	2.609	0.41919
4.04	0.97772	0.16001	30.04	0.38289	2.612	0.41791
4.05	0.97919	0.15937	30.47	0.38253	2.614	0.41663
4.06	0.98065	0.15874	30.92	0.38218	2.617	0.41535
4.07	0.9821	0.15811	31.36	0.38182	2.619	0.41408
4.08	0.98354	0.15748	31.82	0.38147	2.621	0.41281
4.09	0.98498	0.15685	32.28	0.38112	2.624	0.41155
4.1	0.98641	0.15623	32.75	0.38077	2.626	0.41029
4.11	0.98783	0.15561	33.22	0.38043	2.629	0.40904
4.12	0.98925	0.155	33.7	0.38009	2.631	0.40779
4.13	0.99066	0.15439	34.19	0.37975	2.633	0.40655
4.14	0.99206	0.15378	34.69	0.37941	2.636	0.40531
4.15	0.99345	0.15317	35.19	0.37907	2.638	0.40408
4.16	0.99483	0.15257	35.7	0.37874	2.64	0.40285
4.17	0.99621	0.15198	36.21	0.3784	2.643	0.40162
4.18	0.99759	0.15138	36.74	0.37807	2.645	0.4004
4.19	0.99895	0.15079	37.27	0.37774	2.647	0.39919
4.2	1	0.1502	37.81	0.37742	2.65	0.39797
4.21	1.002	0.14962	38.35	0.37709	2.652	0.39677
4.22	1.003	0.14904	38.9	0.37677	2.654	0.39556
4.23	1.004	0.14846	39.47	0.37645	2.656	0.39437
4.24	1.006	0.14789	40.03	0.37613	2.659	0.39317
4.25	1.007	0.14731	40.61	0.37582	2.661	0.39198
4.26	1.008	0.14675	41.2	0.3755	2.663	0.3908
4.27	1.01	0.14618	41.79	0.37519	2.665	0.38962
4.28	1.011	0.14562	42.39	0.37488	2.668	0.38844
4.29	1.012	0.14506	43	0.37457	2.67	0.38727
4.3	1.014	0.1445	43.62	0.37427	2.672	0.3861
4.31	1.015	0.14395	44.25	0.37396	2.674	0.38494
4.32	1.016	0.1434	44.88	0.37366	2.676	0.38378
4.33	1.017	0.14286	45.53	0.37336	2.678	0.38262
4.34	1.019	0.14231	46.18	0.37306	2.681	0.38147

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
4.35	1.02	0.14177	46.84	0.37276	2.683	0.38033
4.36	1.021	0.14123	47.52	0.37247	2.685	0.37918
4.37	1.022	0.1407	48.2	0.37217	2.687	0.37805
4.38	1.024	0.14017	48.89	0.37188	2.689	0.37691
4.39	1.025	0.13964	49.59	0.37159	2.691	0.37578
4.4	1.026	0.13911	50.3	0.3713	2.693	0.37466
4.41	1.027	0.13859	51.02	0.37102	2.695	0.37354
4.42	1.028	0.13807	51.75	0.37073	2.697	0.37242
4.43	1.03	0.13755	52.49	0.37045	2.699	0.37131
4.44	1.031	0.13704	53.24	0.37017	2.701	0.3702
4.45	1.032	0.13652	54	0.36989	2.704	0.3691
4.46	1.033	0.13602	54.77	0.36961	2.706	0.368
4.47	1.034	0.13551	55.55	0.36933	2.708	0.3669
4.48	1.036	0.135	56.34	0.36906	2.71	0.36581
4.49	1.037	0.1345	57.14	0.36879	2.712	0.36472
4.5	1.038	0.13401	57.96	0.36851	2.714	0.36364
4.51	1.039	0.13351	58.78	0.36824	2.716	0.36256
4.52	1.04	0.13302	59.62	0.36798	2.718	0.36148
4.53	1.041	0.13253	60.47	0.36771	2.72	0.36041
4.54	1.043	0.13204	61.33	0.36744	2.722	0.35934
4.55	1.044	0.13155	62.2	0.36718	2.723	0.35828
4.56	1.045	0.13107	63.08	0.36692	2.725	0.35722
4.57	1.046	0.13059	63.98	0.36666	2.727	0.35616
4.58	1.047	0.13011	64.89	0.3664	2.729	0.35511
4.59	1.048	0.12964	65.8	0.36614	2.731	0.35406
4.6	1.049	0.12916	66.74	0.36588	2.733	0.35302
4.61	1.05	0.12869	67.68	0.36563	2.735	0.35198
4.62	1.052	0.12823	68.64	0.36538	2.737	0.35094
4.63	1.053	0.12776	69.61	0.36513	2.739	0.34991
4.64	1.054	0.1273	70.59	0.36488	2.741	0.34888
4.65	1.055	0.12684	71.59	0.36463	2.743	0.34785
4.66	1.056	0.12638	72.6	0.36438	2.744	0.34683

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
4.67	1.057	0.12592	73.63	0.36413	2.746	0.34582
4.68	1.058	0.12547	74.67	0.36389	2.748	0.3448
4.69	1.059	0.12502	75.72	0.36365	2.75	0.34379
4.7	1.06	0.12457	76.78	0.3634	2.752	0.34279
4.71	1.061	0.12412	77.87	0.36316	2.754	0.34178
4.72	1.062	0.12368	78.96	0.36293	2.755	0.34079
4.73	1.063	0.12324	80.07	0.36269	2.757	0.33979
4.74	1.064	0.1228	81.2	0.36245	2.759	0.3388
4.75	1.065	0.12236	82.34	0.36222	2.761	0.33781
4.76	1.066	0.12193	83.49	0.36198	2.763	0.33683
4.77	1.067	0.12149	84.66	0.36175	2.764	0.33585
4.78	1.068	0.12106	85.85	0.36152	2.766	0.33487
4.79	1.069	0.12063	87.05	0.36129	2.768	0.3339
4.8	1.07	0.12021	88.27	0.36106	2.77	0.33293
4.81	1.071	0.11978	89.51	0.36084	2.771	0.33196
4.82	1.072	0.11936	90.76	0.36061	2.773	0.331
4.83	1.073	0.11894	92.03	0.36039	2.775	0.33004
4.84	1.074	0.11853	93.31	0.36016	2.777	0.32909
4.85	1.075	0.11811	94.61	0.35994	2.778	0.32814
4.86	1.076	0.1177	95.93	0.35972	2.78	0.32719
4.87	1.077	0.11729	97.27	0.3595	2.782	0.32625
4.88	1.078	0.11688	98.62	0.35928	2.783	0.32531
4.89	1.079	0.11647	100	0.35906	2.785	0.32437
4.9	1.08	0.11606	$1.E+2$	0.35885	2.787	0.32343
4.91	1.081	0.11566	$1.E+2$	0.35863	2.788	0.3225
4.92	1.082	0.11526	$1.E+2$	0.35842	2.79	0.32158
4.93	1.083	0.11486	$1.1E+2$	0.35821	2.792	0.32065
4.94	1.084	0.11446	$1.1E+2$	0.358	2.793	0.31973
4.95	1.085	0.11407	$1.1E+2$	0.35779	2.795	0.31882
4.96	1.086	0.11368	$1.1E+2$	0.35758	2.797	0.3179
4.97	1.087	0.11328	$1.1E+2$	0.35737	2.798	0.31699
4.98	1.088	0.1129	$1.1E+2$	0.35716	2.8	0.31609

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
4.99	1.089	0.11251	$1.1E+2$	0.35696	2.801	0.31519
5	1.09	0.11212	$1.2E+2$	0.35675	2.803	0.31429
5.02	1.091	0.11136	$1.2E+2$	0.35635	2.806	0.3125
5.04	1.093	0.1106	$1.2E+2$	0.35595	2.809	0.31072
5.06	1.095	0.10985	$1.3E+2$	0.35555	2.813	0.30896
5.08	1.097	0.10911	$1.3E+2$	0.35516	2.816	0.30721
5.1	1.099	0.10837	$1.3E+2$	0.35477	2.819	0.30547
5.12	1.1	0.10764	$1.4E+2$	0.35438	2.822	0.30375
5.14	1.102	0.10692	$1.4E+2$	0.354	2.825	0.30204
5.16	1.104	0.10621	$1.4E+2$	0.35363	2.828	0.30034
5.18	1.105	0.1055	$1.5E+2$	0.35326	2.831	0.29865
5.2	1.107	0.1048	$1.5E+2$	0.35289	2.834	0.29698
5.22	1.109	0.10411	$1.6E+2$	0.35252	2.837	0.29531
5.24	1.11	0.10342	$1.6E+2$	0.35216	2.84	0.29367
5.26	1.112	0.10274	$1.7E+2$	0.3518	2.842	0.29203
5.28	1.114	0.10206	$1.7E+2$	0.35145	2.845	0.2904
5.3	1.115	0.10139	$1.7E+2$	0.3511	2.848	0.28879
5.32	1.117	0.10073	$1.8E+2$	0.35076	2.851	0.28719
5.34	1.118	0.10008	$1.8E+2$	0.35041	2.854	0.2856
5.36	1.12	0.099428	$1.9E+2$	0.35007	2.857	0.28402
5.38	1.121	0.098785	$1.9E+2$	0.34974	2.859	0.28245
5.4	1.123	0.098148	$2.E+2$	0.34941	2.862	0.2809
5.42	1.125	0.097517	$2.1E+2$	0.34908	2.865	0.27936
5.44	1.126	0.096891	$2.1E+2$	0.34875	2.867	0.27782
5.46	1.128	0.096272	$2.2E+2$	0.34843	2.87	0.2763
5.48	1.129	0.095658	$2.2E+2$	0.34811	2.873	0.27479
5.5	1.13	0.09505	$2.3E+2$	0.3478	2.875	0.27329
5.52	1.132	0.094447	$2.3E+2$	0.34748	2.878	0.2718
5.54	1.133	0.09385	$2.4E+2$	0.34717	2.88	0.27033
5.56	1.135	0.093258	$2.5E+2$	0.34687	2.883	0.26886
5.58	1.136	0.092672	$2.5E+2$	0.34656	2.885	0.2674
5.6	1.138	0.092091	$2.6E+2$	0.34626	2.888	0.26596

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
5.62	1.139	0.091516	$2.7E+2$	0.34597	2.89	0.26452
5.64	1.14	0.090945	$2.7E+2$	0.34567	2.893	0.2631
5.66	1.142	0.09038	$2.8E+2$	0.34538	2.895	0.26168
5.68	1.143	0.08982	$2.9E+2$	0.34509	2.898	0.26028
5.7	1.144	0.089264	$3.E+2$	0.3448	2.9	0.25888
5.72	1.146	0.088714	$3.E+2$	0.34452	2.903	0.2575
5.74	1.147	0.088169	$3.1E+2$	0.34424	2.905	0.25613
5.76	1.148	0.087628	$3.2E+2$	0.34396	2.907	0.25476
5.78	1.15	0.087093	$3.3E+2$	0.34369	2.91	0.25341
5.8	1.151	0.086562	$3.4E+2$	0.34341	2.912	0.25206
5.82	1.152	0.086035	$3.5E+2$	0.34314	2.914	0.25073
5.84	1.153	0.085514	$3.6E+2$	0.34288	2.917	0.2494
5.86	1.155	0.084997	$3.6E+2$	0.34261	2.919	0.24809
5.88	1.156	0.084484	$3.7E+2$	0.34235	2.921	0.24678
5.9	1.157	0.083976	$3.8E+2$	0.34209	2.923	0.24548
5.92	1.158	0.083473	$3.9E+2$	0.34183	2.925	0.24419
5.94	1.16	0.082974	$4.E+2$	0.34158	2.928	0.24291
5.96	1.161	0.082479	$4.1E+2$	0.34132	2.93	0.24164
5.98	1.162	0.081988	$4.2E+2$	0.34107	2.932	0.24038
6	1.163	0.081502	$4.4E+2$	0.34082	2.934	0.23913
6.02	1.164	0.081019	$4.5E+2$	0.34058	2.936	0.23789
6.04	1.166	0.080541	$4.6E+2$	0.34034	2.938	0.23665
6.06	1.167	0.080067	$4.7E+2$	0.34009	2.94	0.23543
6.08	1.168	0.079597	$4.8E+2$	0.33986	2.942	0.23421
6.1	1.169	0.079132	$4.9E+2$	0.33962	2.944	0.233
6.12	1.17	0.07867	$5.1E+2$	0.33938	2.947	0.2318
6.14	1.171	0.078211	$5.2E+2$	0.33915	2.949	0.23061
6.16	1.172	0.077757	$5.3E+2$	0.33892	2.951	0.22943
6.18	1.173	0.077307	$5.5E+2$	0.33869	2.953	0.22825
6.2	1.174	0.07686	$5.6E+2$	0.33847	2.955	0.22709
6.22	1.176	0.076418	$5.7E+2$	0.33824	2.956	0.22593
6.24	1.177	0.075978	$5.9E+2$	0.33802	2.958	0.22478

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
6.26	1.178	0.075543	$6.E+2$	0.3378	2.96	0.22363
6.28	1.179	0.075111	$6.2E+2$	0.33758	2.962	0.2225
6.3	1.18	0.074683	$6.3E+2$	0.33736	2.964	0.22137
6.32	1.181	0.074258	$6.5E+2$	0.33715	2.966	0.22025
6.34	1.182	0.073837	$6.7E+2$	0.33694	2.968	0.21914
6.36	1.183	0.073419	$6.8E+2$	0.33673	2.97	0.21804
6.38	1.184	0.073005	$7.E+2$	0.33652	2.972	0.21694
6.4	1.185	0.072594	$7.2E+2$	0.33631	2.973	0.21586
6.42	1.186	0.072187	$7.4E+2$	0.3361	2.975	0.21477
6.44	1.187	0.071782	$7.5E+2$	0.3359	2.977	0.2137
6.46	1.188	0.071382	$7.7E+2$	0.3357	2.979	0.21264
6.48	1.189	0.070984	$7.9E+2$	0.3355	2.981	0.21158
6.5	1.19	0.070589	$8.1E+2$	0.3353	2.982	0.21053
6.52	1.191	0.070198	$8.3E+2$	0.3351	2.984	0.20948
6.54	1.192	0.06981	$8.5E+2$	0.33491	2.986	0.20845
6.56	1.193	0.069425	$8.7E+2$	0.33472	2.988	0.20742
6.58	1.194	0.069043	$8.9E+2$	0.33452	2.989	0.20639
6.6	1.194	0.068664	$9.1E+2$	0.33433	2.991	0.20538
6.62	1.195	0.068289	$9.4E+2$	0.33415	2.993	0.20437
6.64	1.196	0.067916	$9.6E+2$	0.33396	2.994	0.20337
6.66	1.197	0.067546	$9.8E+2$	0.33377	2.996	0.20237
6.68	1.198	0.067179	$1.E+3$	0.33359	2.998	0.20138
6.7	1.199	0.066815	$1.E+3$	0.33341	2.999	0.2004
6.72	1.2	0.066454	$1.1E+3$	0.33323	3.001	0.19943
6.74	1.201	0.066096	$1.1E+3$	0.33305	3.003	0.19846
6.76	1.202	0.06574	$1.1E+3$	0.33287	3.004	0.1975
6.78	1.202	0.065388	$1.1E+3$	0.33269	3.006	0.19654
6.8	1.203	0.065038	$1.2E+3$	0.33252	3.007	0.19559
6.82	1.204	0.06469	$1.2E+3$	0.33235	3.009	0.19465
6.84	1.205	0.064346	$1.2E+3$	0.33217	3.01	0.19371
6.86	1.206	0.064004	$1.2E+3$	0.332	3.012	0.19278
6.88	1.207	0.063665	$1.3E+3$	0.33184	3.014	0.19186

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
6.9	1.207	0.063328	$1.3E+3$	0.33167	3.015	0.19094
6.92	1.208	0.062994	$1.3E+3$	0.3315	3.017	0.19003
6.94	1.209	0.062663	$1.4E+3$	0.33134	3.018	0.18912
6.96	1.21	0.062334	$1.4E+3$	0.33117	3.02	0.18822
6.98	1.211	0.062008	$1.4E+3$	0.33101	3.021	0.18733
7	1.212	0.061684	$1.5E+3$	0.33085	3.023	0.18644
7.02	1.212	0.061363	$1.5E+3$	0.33069	3.024	0.18556
7.04	1.213	0.061044	$1.5E+3$	0.33053	3.025	0.18468
7.06	1.214	0.060727	$1.6E+3$	0.33038	3.027	0.18381
7.08	1.215	0.060413	$1.6E+3$	0.33022	3.028	0.18295
7.1	1.215	0.060101	$1.6E+3$	0.33007	3.03	0.18209
7.12	1.216	0.059792	$1.7E+3$	0.32991	3.031	0.18124
7.14	1.217	0.059485	$1.7E+3$	0.32976	3.033	0.18039
7.16	1.218	0.05918	$1.8E+3$	0.32961	3.034	0.17955
7.18	1.218	0.058878	$1.8E+3$	0.32946	3.035	0.17871
7.2	1.219	0.058577	$1.8E+3$	0.32931	3.037	0.17788
7.22	1.22	0.058279	$1.9E+3$	0.32916	3.038	0.17705
7.24	1.221	0.057983	$1.9E+3$	0.32902	3.039	0.17623
7.26	1.221	0.05769	$2.E+3$	0.32887	3.041	0.17542
7.28	1.222	0.057398	$2.E+3$	0.32873	3.042	0.17461
7.3	1.223	0.057109	$2.1E+3$	0.32859	3.043	0.1738
7.32	1.223	0.056822	$2.1E+3$	0.32844	3.045	0.173
7.34	1.224	0.056537	$2.2E+3$	0.3283	3.046	0.17221
7.36	1.225	0.056254	$2.2E+3$	0.32816	3.047	0.17142
7.38	1.226	0.055973	$2.3E+3$	0.32803	3.049	0.17064
7.4	1.226	0.055694	$2.3E+3$	0.32789	3.05	0.16986
7.42	1.227	0.055418	$2.4E+3$	0.32775	3.051	0.16908
7.44	1.228	0.055143	$2.4E+3$	0.32762	3.052	0.16832
7.46	1.228	0.05487	$2.5E+3$	0.32748	3.054	0.16755
7.48	1.229	0.054599	$2.5E+3$	0.32735	3.055	0.16679
7.5	1.23	0.05433	$2.6E+3$	0.32722	3.056	0.16604
7.52	1.23	0.054063	$2.7E+3$	0.32709	3.057	0.16529

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
7.54	1.231	0.053798	$2.7E+3$	0.32696	3.059	0.16454
7.56	1.232	0.053535	$2.8E+3$	0.32683	3.06	0.1638
7.58	1.232	0.053274	$2.8E+3$	0.3267	3.061	0.16307
7.6	1.233	0.053015	$2.9E+3$	0.32657	3.062	0.16234
7.62	1.233	0.052757	$3.E+3$	0.32644	3.063	0.16161
7.64	1.234	0.052501	$3.E+3$	0.32632	3.064	0.16089
7.66	1.235	0.052248	$3.1E+3$	0.32619	3.066	0.16017
7.68	1.235	0.051996	$3.2E+3$	0.32607	3.067	0.15946
7.7	1.236	0.051745	$3.2E+3$	0.32595	3.068	0.15875
7.72	1.237	0.051497	$3.3E+3$	0.32583	3.069	0.15805
7.74	1.237	0.05125	$3.4E+3$	0.32571	3.07	0.15735
7.76	1.238	0.051005	$3.5E+3$	0.32559	3.071	0.15666
7.78	1.238	0.050762	$3.5E+3$	0.32547	3.073	0.15597
7.8	1.239	0.05052	$3.6E+3$	0.32535	3.074	0.15528
7.82	1.24	0.05028	$3.7E+3$	0.32523	3.075	0.1546
7.84	1.24	0.050042	$3.8E+3$	0.32511	3.076	0.15392
7.86	1.241	0.049805	$3.8E+3$	0.325	3.077	0.15325
7.88	1.241	0.04957	$3.9E+3$	0.32488	3.078	0.15258
7.9	1.242	0.049337	$4.E+3$	0.32477	3.079	0.15191
7.92	1.242	0.049105	$4.1E+3$	0.32466	3.08	0.15125
7.94	1.243	0.048875	$4.2E+3$	0.32454	3.081	0.15059
7.96	1.244	0.048646	$4.3E+3$	0.32443	3.082	0.14994
7.98	1.244	0.048419	$4.4E+3$	0.32432	3.083	0.14929
8	1.245	0.048194	$4.5E+3$	0.32421	3.084	0.14865
8.02	1.245	0.04797	$4.6E+3$	0.3241	3.085	0.14801
8.04	1.246	0.047747	$4.7E+3$	0.32399	3.086	0.14737
8.06	1.246	0.047527	$4.8E+3$	0.32389	3.087	0.14674
8.08	1.247	0.047307	$4.9E+3$	0.32378	3.089	0.14611
8.1	1.247	0.047089	$5.E+3$	0.32367	3.09	0.14548
8.12	1.248	0.046873	$5.1E+3$	0.32357	3.091	0.14486
8.14	1.248	0.046658	$5.2E+3$	0.32346	3.092	0.14424
8.16	1.249	0.046444	$5.3E+3$	0.32336	3.093	0.14363

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
8.18	1.25	0.046232	$5.4E+3$	0.32326	3.094	0.14302
8.2	1.25	0.046022	$5.5E+3$	0.32316	3.094	0.14241
8.22	1.251	0.045812	$5.6E+3$	0.32305	3.095	0.14181
8.24	1.251	0.045604	$5.8E+3$	0.32295	3.096	0.14121
8.26	1.252	0.045398	$5.9E+3$	0.32285	3.097	0.14062
8.28	1.252	0.045193	$6.E+3$	0.32275	3.098	0.14002
8.3	1.253	0.044989	$6.1E+3$	0.32265	3.099	0.13943
8.32	1.253	0.044787	$6.3E+3$	0.32256	3.1	0.13885
8.34	1.254	0.044586	$6.4E+3$	0.32246	3.101	0.13827
8.36	1.254	0.044386	$6.5E+3$	0.32236	3.102	0.13769
8.38	1.255	0.044187	$6.6E+3$	0.32226	3.103	0.13712
8.4	1.255	0.04399	$6.8E+3$	0.32217	3.104	0.13654
8.42	1.256	0.043795	$6.9E+3$	0.32207	3.105	0.13598
8.44	1.256	0.0436	$7.1E+3$	0.32198	3.106	0.13541
8.46	1.256	0.043407	$7.2E+3$	0.32189	3.107	0.13485
8.48	1.257	0.043215	$7.4E+3$	0.32179	3.108	0.13429
8.5	1.257	0.043024	$7.5E+3$	0.3217	3.108	0.13374
8.52	1.258	0.042834	$7.7E+3$	0.32161	3.109	0.13319
8.54	1.258	0.042646	$7.8E+3$	0.32152	3.11	0.13264
8.56	1.259	0.042459	$8.E+3$	0.32143	3.111	0.13209
8.58	1.259	0.042273	$8.2E+3$	0.32134	3.112	0.13155
8.6	1.26	0.042088	$8.3E+3$	0.32125	3.113	0.13101
8.62	1.26	0.041905	$8.5E+3$	0.32116	3.114	0.13048
8.64	1.261	0.041722	$8.7E+3$	0.32107	3.115	0.12995
8.66	1.261	0.041541	$8.8E+3$	0.32098	3.115	0.12942
8.68	1.262	0.041361	$9.E+3$	0.3209	3.116	0.12889
8.7	1.262	0.041182	$9.2E+3$	0.32081	3.117	0.12837
8.72	1.262	0.041005	$9.4E+3$	0.32073	3.118	0.12785
8.74	1.263	0.040828	$9.6E+3$	0.32064	3.119	0.12733
8.76	1.263	0.040653	$9.8E+3$	0.32056	3.12	0.12682
8.78	1.264	0.040478	$1.E+4$	0.32047	3.12	0.12631
8.8	1.264	0.040305	$1.E+4$	0.32039	3.121	0.1258

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
8.82	1.265	0.040133	$1.E+4$	0.3203	3.122	0.1253
8.84	1.265	0.039962	$1.1E+4$	0.32022	3.123	0.12479
8.86	1.265	0.039792	$1.1E+4$	0.32014	3.124	0.12429
8.88	1.266	0.039623	$1.1E+4$	0.32006	3.124	0.1238
8.9	1.266	0.039455	$1.1E+4$	0.31998	3.125	0.1233
8.92	1.267	0.039288	$1.1E+4$	0.3199	3.126	0.12281
8.94	1.267	0.039122	$1.2E+4$	0.31982	3.127	0.12233
8.96	1.268	0.038957	$1.2E+4$	0.31974	3.128	0.12184
8.98	1.268	0.038794	$1.2E+4$	0.31966	3.128	0.12136
9	1.268	0.038631	$1.2E+4$	0.31958	3.129	0.12088
9.02	1.269	0.038469	$1.3E+4$	0.3195	3.13	0.1204
9.04	1.269	0.038308	$1.3E+4$	0.31943	3.131	0.11993
9.06	1.27	0.038148	$1.3E+4$	0.31935	3.131	0.11946
9.08	1.27	0.03799	$1.3E+4$	0.31927	3.132	0.11899
9.1	1.27	0.037832	$1.4E+4$	0.3192	3.133	0.11852
9.12	1.271	0.037675	$1.4E+4$	0.31912	3.134	0.11806
9.14	1.271	0.037519	$1.4E+4$	0.31905	3.134	0.1176
9.16	1.271	0.037364	$1.4E+4$	0.31897	3.135	0.11714
9.18	1.272	0.03721	$1.5E+4$	0.3189	3.136	0.11668
9.2	1.272	0.037057	$1.5E+4$	0.31883	3.137	0.11623
9.22	1.273	0.036905	$1.5E+4$	0.31875	3.137	0.11578
9.24	1.273	0.036754	$1.6E+4$	0.31868	3.138	0.11533
9.26	1.273	0.036603	$1.6E+4$	0.31861	3.139	0.11489
9.28	1.274	0.036454	$1.6E+4$	0.31854	3.139	0.11444
9.3	1.274	0.036305	$1.7E+4$	0.31847	3.14	0.114
9.32	1.274	0.036158	$1.7E+4$	0.31839	3.141	0.11356
9.34	1.275	0.036011	$1.7E+4$	0.31832	3.141	0.11313
9.36	1.275	0.035865	$1.8E+4$	0.31825	3.142	0.11269
9.38	1.276	0.03572	$1.8E+4$	0.31818	3.143	0.11226
9.4	1.276	0.035576	$1.8E+4$	0.31812	3.144	0.11183
9.42	1.276	0.035433	$1.9E+4$	0.31805	3.144	0.11141
9.44	1.277	0.03529	$1.9E+4$	0.31798	3.145	0.11098

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
9.46	1.277	0.035149	$1.9E+4$	0.31791	3.146	0.11056
9.48	1.277	0.035008	$2.E+4$	0.31784	3.146	0.11014
9.5	1.278	0.034868	$2.E+4$	0.31778	3.147	0.10973
9.52	1.278	0.034729	$2.E+4$	0.31771	3.148	0.10931
9.54	1.278	0.034591	$2.1E+4$	0.31764	3.148	0.1089
9.56	1.279	0.034453	$2.1E+4$	0.31758	3.149	0.10849
9.58	1.279	0.034317	$2.2E+4$	0.31751	3.149	0.10808
9.6	1.279	0.034181	$2.2E+4$	0.31745	3.15	0.10767
9.62	1.28	0.034046	$2.2E+4$	0.31738	3.151	0.10727
9.64	1.28	0.033912	$2.3E+4$	0.31732	3.151	0.10687
9.66	1.28	0.033778	$2.3E+4$	0.31726	3.152	0.10647
9.68	1.281	0.033645	$2.4E+4$	0.31719	3.153	0.10607
9.7	1.281	0.033514	$2.4E+4$	0.31713	3.153	0.10568
9.72	1.281	0.033382	$2.5E+4$	0.31707	3.154	0.10528
9.74	1.282	0.033252	$2.5E+4$	0.317	3.155	0.10489
9.76	1.282	0.033122	$2.5E+4$	0.31694	3.155	0.10451
9.78	1.282	0.032993	$2.6E+4$	0.31688	3.156	0.10412
9.8	1.283	0.032865	$2.6E+4$	0.31682	3.156	0.10373
9.82	1.283	0.032738	$2.7E+4$	0.31676	3.157	0.10335
9.84	1.283	0.032611	$2.7E+4$	0.3167	3.158	0.10297
9.86	1.284	0.032485	$2.8E+4$	0.31664	3.158	0.10259
9.88	1.284	0.03236	$2.8E+4$	0.31658	3.159	0.10222
9.9	1.284	0.032235	$2.9E+4$	0.31652	3.159	0.10184
9.92	1.284	0.032111	$2.9E+4$	0.31646	3.16	0.10147
9.94	1.285	0.031988	$3.E+4$	0.3164	3.161	0.1011
9.96	1.285	0.031866	$3.1E+4$	0.31634	3.161	0.10073
9.98	1.285	0.031744	$3.1E+4$	0.31629	3.162	0.10036
10	1.286	0.031623	$3.2E+4$	0.31623	3.162	0.1
10.1	1.287	0.031027	$3.5E+4$	0.31594	3.165	0.098206
10.2	1.289	0.030449	$3.8E+4$	0.31567	3.168	0.096457
10.3	1.29	0.029886	$4.1E+4$	0.3154	3.171	0.094754
10.4	1.291	0.029338	$4.5E+4$	0.31514	3.173	0.093094

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
10.5	1.293	0.028805	$4.9E+4$	0.31489	3.176	0.091476
10.6	1.294	0.028286	$5.4E+4$	0.31464	3.178	0.089899
10.7	1.295	0.027781	$5.8E+4$	0.3144	3.181	0.088361
10.8	1.296	0.027289	$6.4E+4$	0.31417	3.183	0.08686
10.9	1.298	0.02681	$6.9E+4$	0.31394	3.185	0.085397
11	1.299	0.026343	$7.5E+4$	0.31372	3.188	0.083969
11.1	1.3	0.025888	$8.2E+4$	0.31351	3.19	0.082576
11.2	1.301	0.025445	$8.9E+4$	0.3133	3.192	0.081217
11.3	1.302	0.025013	$9.6E+4$	0.3131	3.194	0.07989
11.4	1.303	0.024592	$1.E+5$	0.3129	3.196	0.078594
11.5	1.304	0.024181	$1.1E+5$	0.3127	3.198	0.077329
11.6	1.305	0.02378	$1.2E+5$	0.31251	3.2	0.076093
11.7	1.306	0.023389	$1.3E+5$	0.31233	3.202	0.074886
11.8	1.307	0.023008	$1.4E+5$	0.31215	3.204	0.073707
11.9	1.308	0.022635	$1.6E+5$	0.31198	3.205	0.072555
12	1.309	0.022272	$1.7E+5$	0.3118	3.207	0.071429
12.1	1.31	0.021917	$1.8E+5$	0.31164	3.209	0.070328
12.2	1.311	0.02157	$2.E+5$	0.31148	3.211	0.069252
12.3	1.312	0.021232	$2.1E+5$	0.31132	3.212	0.0682
12.4	1.312	0.020901	$2.3E+5$	0.31116	3.214	0.067171
12.5	1.313	0.020578	$2.5E+5$	0.31101	3.215	0.066165
12.6	1.314	0.020262	$2.6E+5$	0.31086	3.217	0.065181
12.7	1.315	0.019954	$2.8E+5$	0.31072	3.218	0.064219
12.8	1.316	0.019652	$3.1E+5$	0.31058	3.22	0.063277
12.9	1.316	0.019357	$3.3E+5$	0.31044	3.221	0.062355
13	1.317	0.019069	$3.5E+5$	0.3103	3.223	0.061453
13.1	1.318	0.018787	$3.8E+5$	0.31017	3.224	0.060569
13.2	1.318	0.018511	$4.1E+5$	0.31004	3.225	0.059705
13.3	1.319	0.018241	$4.4E+5$	0.30992	3.227	0.058858
13.4	1.32	0.017977	$4.7E+5$	0.30979	3.228	0.058029
13.5	1.32	0.017719	$5.E+5$	0.30967	3.229	0.057217
13.6	1.321	0.017466	$5.4E+5$	0.30955	3.23	0.056422

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
13.7	1.322	0.017218	$5.8E+5$	0.30944	3.232	0.055643
13.8	1.322	0.016976	$6.2E+5$	0.30933	3.233	0.054879
13.9	1.323	0.016738	$6.7E+5$	0.30922	3.234	0.054131
14	1.323	0.016506	$7.1E+5$	0.30911	3.235	0.053398
14.1	1.324	0.016278	$7.6E+5$	0.309	3.236	0.052679
14.2	1.325	0.016055	$8.1E+5$	0.3089	3.237	0.051975
14.3	1.325	0.015836	$8.7E+5$	0.3088	3.238	0.051284
14.4	1.326	0.015622	$9.3E+5$	0.3087	3.239	0.050607
14.5	1.326	0.015412	$9.9E+5$	0.3086	3.24	0.049943
14.6	1.327	0.015207	$1.1E+6$	0.3085	3.241	0.049292
14.7	1.327	0.015005	$1.1E+6$	0.30841	3.242	0.048653
14.8	1.328	0.014807	$1.2E+6$	0.30832	3.243	0.048027
14.9	1.328	0.014614	$1.3E+6$	0.30823	3.244	0.047412
15	1.329	0.014424	$1.4E+6$	0.30814	3.245	0.046809
15.1	1.329	0.014237	$1.5E+6$	0.30805	3.246	0.046217
15.2	1.33	0.014054	$1.6E+6$	0.30797	3.247	0.045636
15.3	1.33	0.013875	$1.7E+6$	0.30788	3.248	0.045065
15.4	1.33	0.013699	$1.8E+6$	0.3078	3.249	0.044506
15.5	1.331	0.013526	$1.9E+6$	0.30772	3.25	0.043956
15.6	1.331	0.013357	$2.E+6$	0.30764	3.251	0.043416
15.7	1.332	0.013191	$2.1E+6$	0.30757	3.251	0.042887
15.8	1.332	0.013027	$2.3E+6$	0.30749	3.252	0.042366
15.9	1.332	0.012867	$2.4E+6$	0.30742	3.253	0.041855
16	1.333	0.01271	$2.5E+6$	0.30734	3.254	0.041353
16.1	1.333	0.012555	$2.7E+6$	0.30727	3.254	0.04086
16.2	1.334	0.012404	$2.9E+6$	0.3072	3.255	0.040376
16.3	1.334	0.012255	$3.E+6$	0.30713	3.256	0.0399
16.4	1.334	0.012108	$3.2E+6$	0.30707	3.257	0.039432
16.5	1.335	0.011965	$3.4E+6$	0.307	3.257	0.038973
16.6	1.335	0.011823	$3.6E+6$	0.30693	3.258	0.038521
16.7	1.335	0.011685	$3.8E+6$	0.30687	3.259	0.038077
16.8	1.336	0.011548	$4.1E+6$	0.30681	3.259	0.03764

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
16.9	1.336	0.011414	$4.3E+6$	0.30674	3.26	0.037211
17	1.336	0.011283	$4.6E+6$	0.30668	3.261	0.036789
17.1	1.337	0.011153	$4.8E+6$	0.30662	3.261	0.036374
17.2	1.337	0.011026	$5.1E+6$	0.30656	3.262	0.035967
17.3	1.337	0.010901	$5.4E+6$	0.30651	3.263	0.035565
17.4	1.338	0.010778	$5.7E+6$	0.30645	3.263	0.035171
17.5	1.338	0.010657	$6.E+6$	0.30639	3.264	0.034783
17.6	1.338	0.010538	$6.4E+6$	0.30634	3.264	0.034401
17.7	1.339	0.010421	$6.7E+6$	0.30629	3.265	0.034025
17.8	1.339	0.010306	$7.1E+6$	0.30623	3.265	0.033656
17.9	1.339	0.010193	$7.5E+6$	0.30618	3.266	0.033292
18	1.339	0.010082	$7.9E+6$	0.30613	3.267	0.032934
18.1	1.34	0.00997	$8.3E+6$	0.30608	3.267	0.032582
18.2	1.34	0.00986	$8.8E+6$	0.30603	3.268	0.032235
18.3	1.34	0.00976	$9.3E+6$	0.30598	3.268	0.031894
18.4	1.341	0.00965	$9.8E+6$	0.30593	3.269	0.031558
18.5	1.341	0.00955	$1.E+7$	0.30588	3.269	0.031228
18.6	1.341	0.00945	$1.1E+7$	0.30584	3.27	0.030902
18.7	1.341	0.00935	$1.1E+7$	0.30579	3.27	0.030582
18.8	1.342	0.00925	$1.2E+7$	0.30575	3.271	0.030266
18.9	1.342	0.00916	$1.3E+7$	0.3057	3.271	0.029956
19	1.342	0.00906	$1.3E+7$	0.30566	3.272	0.02965
19.1	1.342	0.00897	$1.4E+7$	0.30562	3.272	0.029348
19.2	1.342	0.00888	$1.5E+7$	0.30557	3.273	0.029051
19.3	1.343	0.00879	$1.6E+7$	0.30553	3.273	0.028759
19.4	1.343	0.0087	$1.6E+7$	0.30549	3.273	0.028471
19.5	1.343	0.00861	$1.7E+7$	0.30545	3.274	0.028187
19.6	1.343	0.00852	$1.8E+7$	0.30541	3.274	0.027907
19.7	1.344	0.00844	$1.9E+7$	0.30537	3.275	0.027632
19.8	1.344	0.00835	$2.E+7$	0.30533	3.275	0.02736
19.9	1.344	0.00827	$2.1E+7$	0.30529	3.276	0.027093
20	1.344	0.00819	$2.2E+7$	0.30526	3.276	0.026829

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
20.1	1.344	0.00811	$2.3E+7$	0.30522	3.276	0.026569
20.2	1.345	0.00803	$2.4E+7$	0.30518	3.277	0.026313
20.3	1.345	0.00795	$2.5E+7$	0.30515	3.277	0.026061
20.4	1.345	0.00788	$2.7E+7$	0.30511	3.277	0.025812
20.5	1.345	0.0078	$2.8E+7$	0.30508	3.278	0.025567
20.6	1.345	0.00773	$2.9E+7$	0.30504	3.278	0.025325
20.7	1.346	0.00765	$3.1E+7$	0.30501	3.279	0.025086
20.8	1.346	0.00758	$3.2E+7$	0.30498	3.279	0.024851
20.9	1.346	0.00751	$3.4E+7$	0.30494	3.279	0.024619
21	1.346	0.00744	$3.5E+7$	0.30491	3.28	0.02439
21.1	1.346	0.00737	$3.7E+7$	0.30488	3.28	0.024165
21.2	1.346	0.0073	$3.9E+7$	0.30485	3.28	0.023942
21.3	1.347	0.00723	$4.1E+7$	0.30482	3.281	0.023723
21.4	1.347	0.00716	$4.2E+7$	0.30479	3.281	0.023506
21.5	1.347	0.0071	$4.4E+7$	0.30476	3.281	0.023293
21.6	1.347	0.00703	$4.7E+7$	0.30473	3.282	0.023082
21.7	1.347	0.00697	$4.9E+7$	0.3047	3.282	0.022874
21.8	1.347	0.00691	$5.1E+7$	0.30467	3.282	0.022669
21.9	1.348	0.00684	$5.3E+7$	0.30464	3.283	0.022467
22	1.348	0.00678	$5.6E+7$	0.30461	3.283	0.022267
22.1	1.348	0.00672	$5.8E+7$	0.30458	3.283	0.02207
22.2	1.348	0.00666	$6.1E+7$	0.30455	3.283	0.021876
22.3	1.348	0.0066	$6.4E+7$	0.30453	3.284	0.021684
22.4	1.348	0.00655	$6.6E+7$	0.3045	3.284	0.021494
22.5	1.348	0.00649	$6.9E+7$	0.30447	3.284	0.021308
22.6	1.349	0.00643	$7.2E+7$	0.30445	3.285	0.021123
22.7	1.349	0.00637	$7.6E+7$	0.30442	3.285	0.020941
22.8	1.349	0.00632	$7.9E+7$	0.3044	3.285	0.020761
22.9	1.349	0.00627	$8.2E+7$	0.30437	3.285	0.020583
23	1.349	0.00621	$8.6E+7$	0.30435	3.286	0.020408
23.1	1.349	0.00616	$9.E+7$	0.30432	3.286	0.020235
23.2	1.349	0.00611	$9.4E+7$	0.3043	3.286	0.020064

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
23.3	1.35	0.00605	$9.8E+7$	0.30428	3.286	0.019895
23.4	1.35	0.006	$1.E+8$	0.30425	3.287	0.019729
23.5	1.35	0.00595	$1.1E+8$	0.30423	3.287	0.019564
23.6	1.35	0.0059	$1.1E+8$	0.30421	3.287	0.019402
23.7	1.35	0.00585	$1.2E+8$	0.30418	3.287	0.019241
23.8	1.35	0.0058	$1.2E+8$	0.30416	3.288	0.019083
23.9	1.35	0.00576	$1.3E+8$	0.30414	3.288	0.018926
24	1.35	0.00571	$1.3E+8$	0.30412	3.288	0.018771
24.1	1.351	0.00566	$1.4E+8$	0.3041	3.288	0.018619
24.2	1.351	0.00562	$1.4E+8$	0.30407	3.289	0.018468
24.3	1.351	0.00557	$1.5E+8$	0.30405	3.289	0.018318
24.4	1.351	0.00552	$1.5E+8$	0.30403	3.289	0.018171
24.5	1.351	0.00548	$1.6E+8$	0.30401	3.289	0.018025
24.6	1.351	0.00544	$1.7E+8$	0.30399	3.29	0.017882
24.7	1.351	0.00539	$1.7E+8$	0.30397	3.29	0.017739
24.8	1.351	0.00535	$1.8E+8$	0.30395	3.29	0.017599
24.9	1.351	0.00531	$1.9E+8$	0.30393	3.29	0.01746
25	1.352	0.00526	$1.9E+8$	0.30391	3.29	0.017323
25.1	1.352	0.00522	$2.E+8$	0.30389	3.291	0.017187
25.2	1.352	0.00518	$2.1E+8$	0.30388	3.291	0.017053
25.3	1.352	0.00514	$2.2E+8$	0.30386	3.291	0.016921
25.4	1.352	0.0051	$2.3E+8$	0.30384	3.291	0.01679
25.5	1.352	0.00506	$2.4E+8$	0.30382	3.291	0.01666
25.6	1.352	0.00502	$2.5E+8$	0.3038	3.292	0.016532
25.7	1.352	0.00498	$2.6E+8$	0.30379	3.292	0.016406
25.8	1.352	0.00495	$2.7E+8$	0.30377	3.292	0.016281
25.9	1.352	0.00491	$2.8E+8$	0.30375	3.292	0.016157
26	1.353	0.00487	$2.9E+8$	0.30373	3.292	0.016035
26.1	1.353	0.00483	$3.E+8$	0.30372	3.293	0.015914
26.2	1.353	0.0048	$3.1E+8$	0.3037	3.293	0.015795
26.3	1.353	0.00476	$3.2E+8$	0.30368	3.293	0.015676
26.4	1.353	0.00472	$3.3E+8$	0.30367	3.293	0.01556

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
26.5	1.353	0.00469	$3.5E+8$	0.30365	3.293	0.015444
26.6	1.353	0.00465	$3.6E+8$	0.30363	3.293	0.01533
26.7	1.353	0.00462	$3.7E+8$	0.30362	3.294	0.015217
26.8	1.353	0.00459	$3.9E+8$	0.3036	3.294	0.015105
26.9	1.353	0.00455	$4.E+8$	0.30359	3.294	0.014994
27	1.353	0.00452	$4.2E+8$	0.30357	3.294	0.014885
27.1	1.353	0.00449	$4.3E+8$	0.30356	3.294	0.014777
27.2	1.354	0.00445	$4.5E+8$	0.30354	3.294	0.01467
27.3	1.354	0.00442	$4.6E+8$	0.30353	3.295	0.014564
27.4	1.354	0.00439	$4.8E+8$	0.30351	3.295	0.014459
27.5	1.354	0.00436	$5.E+8$	0.3035	3.295	0.014356
27.6	1.354	0.00433	$5.2E+8$	0.30348	3.295	0.014253
27.7	1.354	0.00429	$5.3E+8$	0.30347	3.295	0.014152
27.8	1.354	0.00426	$5.5E+8$	0.30346	3.295	0.014051
27.9	1.354	0.00423	$5.7E+8$	0.30344	3.296	0.013952
28	1.354	0.0042	$5.9E+8$	0.30343	3.296	0.013854
28.1	1.354	0.00417	$6.2E+8$	0.30341	3.296	0.013757
28.2	1.354	0.00414	$6.4E+8$	0.3034	3.296	0.013661
28.3	1.354	0.00412	$6.6E+8$	0.30339	3.296	0.013565
28.4	1.354	0.00409	$6.8E+8$	0.30337	3.296	0.013471
28.5	1.355	0.00406	$7.1E+8$	0.30336	3.296	0.013378
28.6	1.355	0.00403	$7.3E+8$	0.30335	3.297	0.013286
28.7	1.355	0.004	$7.6E+8$	0.30334	3.297	0.013194
28.8	1.355	0.00397	$7.9E+8$	0.30332	3.297	0.013104
28.9	1.355	0.00395	$8.1E+8$	0.30331	3.297	0.013015
29	1.355	0.00392	$8.4E+8$	0.3033	3.297	0.012926
29.1	1.355	0.00389	$8.7E+8$	0.30329	3.297	0.012838
29.2	1.355	0.00387	$9.E+8$	0.30327	3.297	0.012752
29.3	1.355	0.00384	$9.3E+8$	0.30326	3.297	0.012666
29.4	1.355	0.00382	$9.6E+8$	0.30325	3.298	0.012581
29.5	1.355	0.00379	$1.E+9$	0.30324	3.298	0.012496
29.6	1.355	0.00376	$1.E+9$	0.30323	3.298	0.012413

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
29.7	1.355	0.00374	$1.1E+9$	0.30322	3.298	0.012331
29.8	1.355	0.00371	$1.1E+9$	0.3032	3.298	0.012249
29.9	1.355	0.00369	$1.1E+9$	0.30319	3.298	0.012168
30	1.356	0.00366	$1.2E+9$	0.30318	3.298	0.012088
30.1	1.356	0.00364	$1.2E+9$	0.30317	3.298	0.012009
30.2	1.356	0.00362	$1.3E+9$	0.30316	3.299	0.01193
30.3	1.356	0.00359	$1.3E+9$	0.30315	3.299	0.011852
30.4	1.356	0.00357	$1.3E+9$	0.30314	3.299	0.011775
30.5	1.356	0.00355	$1.4E+9$	0.30313	3.299	0.011699
30.6	1.356	0.00352	$1.4E+9$	0.30312	3.299	0.011623
30.7	1.356	0.0035	$1.5E+9$	0.30311	3.299	0.011549
30.8	1.356	0.00348	$1.5E+9$	0.3031	3.299	0.011475
30.9	1.356	0.00346	$1.6E+9$	0.30309	3.299	0.011401
31	1.356	0.00343	$1.6E+9$	0.30308	3.3	0.011329
31.1	1.356	0.00341	$1.7E+9$	0.30307	3.3	0.011257
31.2	1.356	0.00339	$1.7E+9$	0.30306	3.3	0.011185
31.3	1.356	0.00337	$1.8E+9$	0.30305	3.3	0.011115
31.4	1.356	0.00335	$1.8E+9$	0.30304	3.3	0.011045
31.5	1.356	0.00333	$1.9E+9$	0.30303	3.3	0.010975
31.6	1.356	0.0033	$2.E+9$	0.30302	3.3	0.010907
31.7	1.356	0.00328	$2.E+9$	0.30301	3.3	0.010839
31.8	1.357	0.00326	$2.1E+9$	0.303	3.3	0.010771
31.9	1.357	0.00324	$2.2E+9$	0.30299	3.3	0.010704
32	1.357	0.00322	$2.2E+9$	0.30298	3.301	0.010638
32.1	1.357	0.0032	$2.3E+9$	0.30297	3.301	0.010573
32.2	1.357	0.00318	$2.4E+9$	0.30296	3.301	0.010508
32.3	1.357	0.00316	$2.4E+9$	0.30295	3.301	0.010443
32.4	1.357	0.00314	$2.5E+9$	0.30294	3.301	0.01038
32.5	1.357	0.00313	$2.6E+9$	0.30294	3.301	0.010317
32.6	1.357	0.00311	$2.7E+9$	0.30293	3.301	0.010254
32.7	1.357	0.00309	$2.8E+9$	0.30292	3.301	0.010192
32.8	1.357	0.00307	$2.8E+9$	0.30291	3.301	0.01013

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
32.9	1.357	0.00305	$2.9E+9$	0.3029	3.301	0.010069
33	1.357	0.00303	$3.E+9$	0.30289	3.302	0.010009
33.1	1.357	0.00301	$3.1E+9$	0.30288	3.302	0.00995
33.2	1.357	0.003	$3.2E+9$	0.30288	3.302	0.00989
33.3	1.357	0.00298	$3.3E+9$	0.30287	3.302	0.00983
33.4	1.357	0.00296	$3.4E+9$	0.30286	3.302	0.00977
33.5	1.357	0.00294	$3.5E+9$	0.30285	3.302	0.00972
33.6	1.357	0.00292	$3.6E+9$	0.30284	3.302	0.00966
33.7	1.357	0.00291	$3.7E+9$	0.30284	3.302	0.0096
33.8	1.357	0.00289	$3.8E+9$	0.30283	3.302	0.00954
33.9	1.358	0.00287	$3.9E+9$	0.30282	3.302	0.00949
34	1.358	0.00286	$4.1E+9$	0.30281	3.302	0.00943
34.1	1.358	0.00284	$4.2E+9$	0.30281	3.302	0.00938
34.2	1.358	0.00282	$4.3E+9$	0.3028	3.303	0.00932
34.3	1.358	0.00281	$4.4E+9$	0.30279	3.303	0.00927
34.4	1.358	0.00279	$4.6E+9$	0.30278	3.303	0.00922
34.5	1.358	0.00277	$4.7E+9$	0.30278	3.303	0.00916
34.6	1.358	0.00276	$4.8E+9$	0.30277	3.303	0.00911
34.7	1.358	0.00274	$5.E+9$	0.30276	3.303	0.00906
34.8	1.358	0.00273	$5.1E+9$	0.30275	3.303	0.00901
34.9	1.358	0.00271	$5.2E+9$	0.30275	3.303	0.00896
35	1.358	0.0027	$5.4E+9$	0.30274	3.303	0.00891
35.1	1.358	0.00268	$5.6E+9$	0.30273	3.303	0.00886
35.2	1.358	0.00267	$5.7E+9$	0.30273	3.303	0.00881
35.3	1.358	0.00265	$5.9E+9$	0.30272	3.303	0.00876
35.4	1.358	0.00264	$6.E+9$	0.30271	3.303	0.00871
35.5	1.358	0.00262	$6.2E+9$	0.30271	3.304	0.00866
35.6	1.358	0.00261	$6.4E+9$	0.3027	3.304	0.00861
35.7	1.358	0.00259	$6.6E+9$	0.30269	3.304	0.00856
35.8	1.358	0.00258	$6.8E+9$	0.30269	3.304	0.00852
35.9	1.358	0.00256	$6.9E+9$	0.30268	3.304	0.00847
36	1.358	0.00255	$7.1E+9$	0.30267	3.304	0.00842

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
36.1	1.358	0.00254	$7.3E+9$	0.30267	3.304	0.00838
36.2	1.358	0.00252	$7.5E+9$	0.30266	3.304	0.00833
36.3	1.358	0.00251	$7.8E+9$	0.30265	3.304	0.00829
36.4	1.358	0.00249	$8.E+9$	0.30265	3.304	0.00824
36.5	1.359	0.00248	$8.2E+9$	0.30264	3.304	0.0082
36.6	1.359	0.00247	$8.4E+9$	0.30263	3.304	0.00815
36.7	1.359	0.00245	$8.6E+9$	0.30263	3.304	0.00811
36.8	1.359	0.00244	$8.9E+9$	0.30262	3.304	0.00806
36.9	1.359	0.00243	$9.1E+9$	0.30262	3.305	0.00802
37	1.359	0.00241	$9.4E+9$	0.30261	3.305	0.00798
37.1	1.359	0.0024	$9.6E+9$	0.3026	3.305	0.00793
37.2	1.359	0.00239	$9.9E+9$	0.3026	3.305	0.00789
37.3	1.359	0.00238	$1.E+10$	0.30259	3.305	0.00785
37.4	1.359	0.00236	$1.E+10$	0.30259	3.305	0.00781
37.5	1.359	0.00235	$1.1E{+}10$	0.30258	3.305	0.00777
37.6	1.359	0.00234	$1.1E{+}10$	0.30258	3.305	0.00773
37.7	1.359	0.00233	$1.1E{+}10$	0.30257	3.305	0.00769
37.8	1.359	0.00231	$1.2E{+}10$	0.30256	3.305	0.00765
37.9	1.359	0.0023	$1.2E{+}10$	0.30256	3.305	0.00761
38	1.359	0.00229	$1.2E{+}10$	0.30255	3.305	0.00757
38.1	1.359	0.00228	$1.3E{+}10$	0.30255	3.305	0.00753
38.2	1.359	0.00227	$1.3E{+}10$	0.30254	3.305	0.00749
38.3	1.359	0.00225	$1.3E{+}10$	0.30254	3.305	0.00745
38.4	1.359	0.00224	$1.4E{+}10$	0.30253	3.305	0.00741
38.5	1.359	0.00223	$1.4E{+}10$	0.30253	3.305	0.00737
38.6	1.359	0.00222	$1.4E{+}10$	0.30252	3.306	0.00733
38.7	1.359	0.00221	$1.5E{+}10$	0.30252	3.306	0.0073
38.8	1.359	0.0022	$1.5E{+}10$	0.30251	3.306	0.00726
38.9	1.359	0.00218	$1.5E{+}10$	0.30251	3.306	0.00722
39	1.359	0.00217	$1.6E{+}10$	0.3025	3.306	0.00718
39.1	1.359	0.00216	$1.6E{+}10$	0.3025	3.306	0.00715
39.2	1.359	0.00215	$1.7E{+}10$	0.30249	3.306	0.00711

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
39.3	1.359	0.00214	1.7E+10	0.30249	3.306	0.00708
39.4	1.359	0.00213	1.7E+10	0.30248	3.306	0.00704
39.5	1.359	0.00212	1.8E+10	0.30248	3.306	0.00701
39.6	1.359	0.00211	1.8E+10	0.30247	3.306	0.00697
39.7	1.359	0.0021	1.9E+10	0.30247	3.306	0.00694
39.8	1.359	0.00209	1.9E+10	0.30246	3.306	0.0069
39.9	1.36	0.00208	$2.E + 10$	0.30246	3.306	0.00687
40	1.36	0.00207	$2.E + 10$	0.30245	3.306	0.00683
40.1	1.36	0.00206	2.1E+10	0.30245	3.306	0.0068
40.2	1.36	0.00205	2.1E+10	0.30244	3.306	0.00676
40.3	1.36	0.00204	2.2E+10	0.30244	3.306	0.00673
40.4	1.36	0.00203	2.2E+10	0.30243	3.307	0.0067
40.5	1.36	0.00202	2.3E+10	0.30243	3.307	0.00667
40.6	1.36	0.00201	2.4E+10	0.30242	3.307	0.00663
40.7	1.36	0.002	2.4E+10	0.30242	3.307	0.0066
40.8	1.36	0.00199	2.5E+10	0.30242	3.307	0.00657
40.9	1.36	0.00198	2.5E+10	0.30241	3.307	0.00654
41	1.36	0.00197	2.6E+10	0.30241	3.307	0.00651
41.1	1.36	0.00196	2.7E+10	0.3024	3.307	0.00647
41.2	1.36	0.00195	2.7E+10	0.3024	3.307	0.00644
41.3	1.36	0.00194	2.8E+10	0.30239	3.307	0.00641
41.4	1.36	0.00193	2.9E+10	0.30239	3.307	0.00638
41.5	1.36	0.00192	2.9E+10	0.30239	3.307	0.00635
41.6	1.36	0.00191	$3.E + 10$	0.30238	3.307	0.00632
41.7	1.36	0.0019	3.1E+10	0.30238	3.307	0.00629
41.8	1.36	0.00189	3.1E+10	0.30237	3.307	0.00626
41.9	1.36	0.00188	3.2E+10	0.30237	3.307	0.00623
42	1.36	0.00187	3.3E+10	0.30236	3.307	0.0062
42.1	1.36	0.00187	3.4E+10	0.30236	3.307	0.00617
42.2	1.36	0.00186	3.5E+10	0.30236	3.307	0.00614
42.3	1.36	0.00185	3.5E+10	0.30235	3.307	0.00611
42.4	1.36	0.00184	3.6E+10	0.30235	3.307	0.00608

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
42.5	1.36	0.00183	3.7E+10	0.30234	3.307	0.00606
42.6	1.36	0.00182	3.8E+10	0.30234	3.308	0.00603
42.7	1.36	0.00181	3.9E+10	0.30234	3.308	0.006
42.8	1.36	0.00181	$4.E+10$	0.30233	3.308	0.00597
42.9	1.36	0.0018	4.1E+10	0.30233	3.308	0.00594
43	1.36	0.00179	4.2E+10	0.30233	3.308	0.00592
43.1	1.36	0.00178	4.3E+10	0.30232	3.308	0.00589
43.2	1.36	0.00177	4.4E+10	0.30232	3.308	0.00586
43.3	1.36	0.00176	4.5E+10	0.30231	3.308	0.00584
43.4	1.36	0.00176	4.6E+10	0.30231	3.308	0.00581
43.5	1.36	0.00175	4.7E+10	0.30231	3.308	0.00578
43.6	1.36	0.00174	4.8E+10	0.3023	3.308	0.00576
43.7	1.36	0.00173	4.9E+10	0.3023	3.308	0.00573
43.8	1.36	0.00172	$5.E+10$	0.3023	3.308	0.0057
43.9	1.36	0.00172	5.1E+10	0.30229	3.308	0.00568
44	1.36	0.00171	5.2E+10	0.30229	3.308	0.00565
44.1	1.36	0.0017	5.4E+10	0.30229	3.308	0.00563
44.2	1.36	0.00169	5.5E+10	0.30228	3.308	0.0056
44.3	1.361	0.00169	5.6E+10	0.30228	3.308	0.00558
44.4	1.361	0.00168	5.7E+10	0.30228	3.308	0.00555
44.5	1.361	0.00167	5.9E+10	0.30227	3.308	0.00553
44.6	1.361	0.00166	$6.E+10$	0.30227	3.308	0.0055
44.7	1.361	0.00166	6.1E+10	0.30226	3.308	0.00548
44.8	1.361	0.00165	6.3E+10	0.30226	3.308	0.00545
44.9	1.361	0.00164	6.4E+10	0.30226	3.308	0.00543
45	1.361	0.00163	6.5E+10	0.30225	3.308	0.00541
45.1	1.361	0.00163	6.7E+10	0.30225	3.309	0.00538
45.2	1.361	0.00162	6.8E+10	0.30225	3.309	0.00536
45.3	1.361	0.00161	$7.E+10$	0.30225	3.309	0.00533
45.4	1.361	0.00161	7.2E+10	0.30224	3.309	0.00531
45.5	1.361	0.0016	7.3E+10	0.30224	3.309	0.00529
45.6	1.361	0.00159	7.5E+10	0.30224	3.309	0.00526

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
45.7	1.361	0.00158	$7.6E{+}10$	0.30223	3.309	0.00524
45.8	1.361	0.00158	$7.8E{+}10$	0.30223	3.309	0.00522
45.9	1.361	0.00157	$8.E+10$	0.30223	3.309	0.0052
46	1.361	0.00156	$8.2E{+}10$	0.30222	3.309	0.00517
46.1	1.361	0.00156	$8.3E{+}10$	0.30222	3.309	0.00515
46.2	1.361	0.00155	$8.5E{+}10$	0.30222	3.309	0.00513
46.3	1.361	0.00154	$8.7E{+}10$	0.30221	3.309	0.00511
46.4	1.361	0.00154	$8.9E{+}10$	0.30221	3.309	0.00509
46.5	1.361	0.00153	$9.1E{+}10$	0.30221	3.309	0.00506
46.6	1.361	0.00152	$9.3E{+}10$	0.3022	3.309	0.00504
46.7	1.361	0.00152	$9.5E{+}10$	0.3022	3.309	0.00502
46.8	1.361	0.00151	$9.7E{+}10$	0.3022	3.309	0.005
46.9	1.361	0.0015	$9.9E{+}10$	0.3022	3.309	0.00498
47	1.361	0.0015	$1.E+11$	0.30219	3.309	0.00496
47.1	1.361	0.00149	$1.E+11$	0.30219	3.309	0.00494
47.2	1.361	0.00149	$1.1E{+}11$	0.30219	3.309	0.00492
47.3	1.361	0.00148	$1.1E{+}11$	0.30218	3.309	0.00489
47.4	1.361	0.00147	$1.1E{+}11$	0.30218	3.309	0.00487
47.5	1.361	0.00147	$1.1E{+}11$	0.30218	3.309	0.00485
47.6	1.361	0.00146	$1.1E{+}11$	0.30218	3.309	0.00483
47.7	1.361	0.00145	$1.2E{+}11$	0.30217	3.309	0.00481
47.8	1.361	0.00145	$1.2E{+}11$	0.30217	3.309	0.00479
47.9	1.361	0.00144	$1.2E{+}11$	0.30217	3.309	0.00477
48	1.361	0.00144	$1.2E{+}11$	0.30216	3.309	0.00475
48.1	1.361	0.00143	$1.3E{+}11$	0.30216	3.309	0.00473
48.2	1.361	0.00142	$1.3E{+}11$	0.30216	3.31	0.00471
48.3	1.361	0.00142	$1.3E{+}11$	0.30216	3.31	0.0047
48.4	1.361	0.00141	$1.4E{+}11$	0.30215	3.31	0.00468
48.5	1.361	0.00141	$1.4E{+}11$	0.30215	3.31	0.00466
48.6	1.361	0.0014	$1.4E{+}11$	0.30215	3.31	0.00464
48.7	1.361	0.0014	$1.4E{+}11$	0.30215	3.31	0.00462
48.8	1.361	0.00139	$1.5E{+}11$	0.30214	3.31	0.0046

Table 5.1: Fanno Flow Standard Basic Table k=1.2 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
48.9	1.361	0.00138	$1.5E{+}11$	0.30214	3.31	0.00458
49	1.361	0.00138	$1.5E{+}11$	0.30214	3.31	0.00456
49.1	1.361	0.00137	$1.6E{+}11$	0.30214	3.31	0.00454
49.2	1.361	0.00137	$1.6E{+}11$	0.30213	3.31	0.00453
49.3	1.361	0.00136	$1.6E{+}11$	0.30213	3.31	0.00451
49.4	1.361	0.00136	$1.7E{+}11$	0.30213	3.31	0.00449
49.5	1.361	0.00135	$1.7E{+}11$	0.30213	3.31	0.00447
49.6	1.361	0.00135	$1.7E{+}11$	0.30212	3.31	0.00445
49.7	1.361	0.00134	$1.8E{+}11$	0.30212	3.31	0.00444
49.8	1.361	0.00133	$1.8E{+}11$	0.30212	3.31	0.00442
49.9	1.361	0.00133	$1.8E{+}11$	0.30212	3.31	0.0044
50	1.361	0.00132	$1.9E{+}11$	0.30211	3.31	0.00438

5.2 Standard Fanno Flow Table for k=1.3

Table 5.2: Fanno Flow Standard Basic Table k=1.3

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.01000	7683.51	107.24	58.5261	93.2512	0.01072	1.1500
0.02000	1915.51	53.6174	29.2681	46.6266	0.02145	1.1499
0.03000	847.85	35.7436	19.5177	31.0856	0.03217	1.1498
0.04000	474.43	26.8063	14.6442	23.3154	0.04289	1.1497
0.05000	301.75	21.4436	11.7214	18.6536	0.05361	1.1496
0.06000	208.05	17.8682	9.7740	15.5459	0.06433	1.1494
0.07000	151.63	15.3141	8.3840	13.3264	0.07504	1.1492
0.08000	115.08	13.3983	7.3423	11.6619	0.08575	1.1489
0.09000	90.0599	11.9081	6.5329	10.3675	0.09646	1.1486
0.10000	72.2024	10.7158	5.8860	9.3320	0.10716	1.1483
0.11000	59.0204	9.7401	5.3574	8.4850	0.11785	1.1479
0.12000	49.0201	8.9269	4.9174	7.7793	0.12855	1.1475
0.13000	41.2592	8.2386	4.5457	7.1822	0.13923	1.1471

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.140000	35.1198	7.6486	4.2275	6.6705	0.14991	1.1466
0.150000	30.1830	7.1372	3.9522	6.2272	0.16059	1.1461
0.160000	26.1568	6.6895	3.7118	5.8393	0.17125	1.1456
0.170000	22.8326	6.2945	3.5001	5.4972	0.18191	1.1450
0.180000	20.0579	5.9432	3.3123	5.1932	0.19256	1.1444
0.190000	17.7197	5.6289	3.1446	4.9212	0.20320	1.1438
0.200000	15.7324	5.3459	2.9940	4.6765	0.21384	1.1431
0.210000	14.0303	5.0898	2.8581	4.4552	0.22446	1.1424
0.220000	12.5624	4.8569	2.7349	4.2540	0.23507	1.1417
0.230000	11.2884	4.6441	2.6227	4.0704	0.24567	1.1409
0.240000	10.1766	4.4491	2.5202	3.9022	0.25627	1.1401
0.250000	9.2012	4.2696	2.4262	3.7475	0.26685	1.1393
0.260000	8.3413	4.1038	2.3396	3.6047	0.27742	1.1385
0.270000	7.5801	3.9502	2.2598	3.4726	0.28797	1.1376
0.280000	6.9035	3.8076	2.1859	3.3499	0.29852	1.1366
0.290000	6.2999	3.6748	2.1174	3.2358	0.30905	1.1357
0.300000	5.7594	3.5507	2.0537	3.1293	0.31956	1.1347
0.310000	5.2741	3.4346	1.9943	3.0297	0.33007	1.1337
0.320000	4.8370	3.3257	1.9389	2.9364	0.34056	1.1326
0.330000	4.4422	3.2234	1.8871	2.8488	0.35103	1.1315
0.340000	4.0848	3.1271	1.8385	2.7663	0.36149	1.1304
0.350000	3.7604	3.0362	1.7930	2.6887	0.37193	1.1293
0.360000	3.4653	2.9503	1.7502	2.6153	0.38236	1.1281
0.370000	3.1963	2.8690	1.7099	2.5460	0.39277	1.1269
0.380000	2.9507	2.7920	1.6719	2.4804	0.40316	1.1256
0.390000	2.7259	2.7189	1.6361	2.4182	0.41354	1.1243
0.400000	2.5200	2.6493	1.6023	2.3591	0.42390	1.1230
0.410000	2.3310	2.5832	1.5704	2.3029	0.43424	1.1217
0.420000	2.1572	2.5202	1.5401	2.2494	0.44456	1.1204
0.430000	1.9973	2.4600	1.5115	2.1985	0.45486	1.1190
0.440000	1.8499	2.4026	1.4843	2.1499	0.46514	1.1175
0.450000	1.7139	2.3477	1.4586	2.1035	0.47541	1.1161

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.46000	1.5882	2.2951	1.4341	2.0591	0.48565	1.1146
0.47000	1.4720	2.2448	1.4109	2.0167	0.49587	1.1131
0.48000	1.3645	2.1965	1.3888	1.9760	0.50607	1.1116
0.49000	1.2648	2.1502	1.3678	1.9370	0.51625	1.1100
0.50000	1.1724	2.1056	1.3479	1.8997	0.52641	1.1084
0.51000	1.0867	2.0629	1.3288	1.8638	0.53655	1.1068
0.52000	1.0071	2.0217	1.3107	1.8293	0.54666	1.1052
0.53000	0.93310	1.9820	1.2935	1.7961	0.55675	1.1035
0.54000	0.86432	1.9438	1.2770	1.7642	0.56682	1.1018
0.55000	0.80035	1.9070	1.2614	1.7335	0.57687	1.1001
0.56000	0.74081	1.8715	1.2464	1.7039	0.58689	1.0983
0.57000	0.68538	1.8371	1.2322	1.6754	0.59689	1.0966
0.58000	0.63376	1.8040	1.2186	1.6478	0.60686	1.0948
0.59000	0.58567	1.7719	1.2056	1.6213	0.61681	1.0929
0.60000	0.54086	1.7409	1.1932	1.5956	0.62673	1.0911
0.61000	0.49910	1.7109	1.1814	1.5708	0.63663	1.0892
0.62000	0.46018	1.6818	1.1702	1.5468	0.64650	1.0873
0.63000	0.42390	1.6537	1.1595	1.5236	0.65634	1.0854
0.64000	0.39008	1.6264	1.1492	1.5011	0.66616	1.0834
0.65000	0.35856	1.5999	1.1395	1.4794	0.67596	1.0815
0.66000	0.32918	1.5742	1.1302	1.4583	0.68572	1.0795
0.67000	0.30181	1.5493	1.1213	1.4379	0.69546	1.0774
0.68000	0.27632	1.5250	1.1129	1.4181	0.70517	1.0754
0.69000	0.25258	1.5015	1.1049	1.3989	0.71486	1.0733
0.70000	0.23048	1.4786	1.0972	1.3802	0.72451	1.0713
0.71000	0.20993	1.4563	1.0900	1.3621	0.73414	1.0692
0.72000	0.19082	1.4347	1.0831	1.3446	0.74374	1.0670
0.73000	0.17306	1.4136	1.0765	1.3275	0.75331	1.0649
0.74000	0.15658	1.3931	1.0703	1.3109	0.76285	1.0627
0.75000	0.14129	1.3731	1.0644	1.2947	0.77236	1.0605
0.76000	0.12713	1.3536	1.0589	1.2790	0.78184	1.0583
0.77000	0.11402	1.3346	1.0536	1.2638	0.79130	1.0561

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.780000	0.10191	1.3161	1.0486	1.2489	0.80072	1.0538
0.790000	0.09074	1.2980	1.0439	1.2344	0.81011	1.0516
0.800000	0.08045	1.2804	1.0395	1.2203	0.81947	1.0493
0.810000	0.07098	1.2632	1.0354	1.2066	0.82880	1.0470
0.820000	0.06230	1.2464	1.0315	1.1932	0.83810	1.0446
0.830000	0.05436	1.2300	1.0279	1.1801	0.84737	1.0423
0.840000	0.04712	1.2140	1.0245	1.1674	0.85661	1.0399
0.850000	0.04053	1.1984	1.0214	1.1550	0.86581	1.0376
0.860000	0.03456	1.1831	1.0185	1.1429	0.87499	1.0352
0.870000	0.02918	1.1681	1.0159	1.1311	0.88413	1.0327
0.880000	0.02435	1.1535	1.0134	1.1195	0.89324	1.0303
0.890000	0.02004	1.1391	1.0112	1.1083	0.90232	1.0279
0.900000	0.01623	1.1251	1.0092	1.0973	0.91136	1.0254
0.910000	0.01288	1.1114	1.0074	1.0865	0.92038	1.0229
0.920000	0.00998	1.098	1.006	1.076	0.92936	1.02
0.93	0.00749	1.085	1.004	1.066	0.9383	1.018
0.94	0.0054	1.072	1.003	1.056	0.94722	1.015
0.95	0.00367	1.059	1.002	1.046	0.9561	1.013
0.96	0.00231	1.047	1.001	1.036	0.96495	1.01
0.97	0.00127	1.035	1.001	1.027	0.97376	1.008
0.98	0.000555	1.023	1	1.018	0.98254	1.005
0.99	0.000136	1.011	1	1.009	0.99129	1.003
1	0	1	1	1	1	1
1.01	0.000131	0.9888	1	0.9914	1.009	0.99739
1.02	0.000516	0.97782	1	0.98297	1.017	0.99476
1.03	0.00114	0.96704	1.001	0.97472	1.026	0.99212
1.04	0.00199	0.95646	1.001	0.96664	1.035	0.98947
1.05	0.00306	0.94608	1.002	0.95873	1.043	0.98681
1.06	0.00433	0.93588	1.003	0.95097	1.052	0.98413
1.07	0.00579	0.92587	1.004	0.94337	1.06	0.98145
1.08	0.00743	0.91604	1.005	0.93592	1.068	0.97876
1.09	0.00924	0.90638	1.007	0.92862	1.077	0.97605

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
1.1	0.011218	0.89689	1.008	0.92146	1.085	0.97334
1.11	0.013348	0.88757	1.01	0.91444	1.094	0.97062
1.12	0.015623	0.8784	1.012	0.90755	1.102	0.96788
1.13	0.018034	0.86939	1.014	0.9008	1.11	0.96514
1.14	0.020576	0.86054	1.016	0.89417	1.118	0.96239
1.15	0.023239	0.85183	1.018	0.88767	1.127	0.95963
1.16	0.026018	0.84327	1.021	0.88129	1.135	0.95687
1.17	0.028906	0.83485	1.023	0.87502	1.143	0.95409
1.18	0.031896	0.82657	1.026	0.86887	1.151	0.95131
1.19	0.034983	0.81842	1.029	0.86284	1.159	0.94852
1.2	0.03816	0.8104	1.032	0.85691	1.167	0.94572
1.21	0.041424	0.80251	1.035	0.85109	1.175	0.94292
1.22	0.044768	0.79475	1.039	0.84538	1.183	0.94011
1.23	0.048188	0.78711	1.042	0.83976	1.191	0.93729
1.24	0.051679	0.77958	1.046	0.83425	1.199	0.93447
1.25	0.055236	0.77217	1.049	0.82883	1.207	0.93165
1.26	0.058856	0.76488	1.053	0.8235	1.214	0.92881
1.27	0.062535	0.7577	1.057	0.81827	1.222	0.92597
1.28	0.066268	0.75062	1.062	0.81313	1.23	0.92313
1.29	0.070052	0.74365	1.066	0.80807	1.238	0.92028
1.3	0.073884	0.73679	1.07	0.8031	1.245	0.91743
1.31	0.07776	0.73003	1.075	0.79821	1.253	0.91457
1.32	0.081678	0.72336	1.08	0.79341	1.26	0.91171
1.33	0.085633	0.71679	1.085	0.78868	1.268	0.90885
1.34	0.089624	0.71032	1.09	0.78403	1.275	0.90598
1.35	0.093648	0.70394	1.095	0.77946	1.283	0.90311
1.36	0.097701	0.69765	1.1	0.77497	1.29	0.90024
1.37	0.10178	0.69145	1.106	0.77054	1.298	0.89736
1.38	0.10589	0.68534	1.111	0.76619	1.305	0.89448
1.39	0.11002	0.67931	1.117	0.7619	1.313	0.8916
1.4	0.11417	0.67337	1.123	0.75769	1.32	0.88872
1.41	0.11834	0.66751	1.129	0.75354	1.327	0.88583

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
1.42	0.12252	0.66173	1.135	0.74945	1.334	0.88294
1.43	0.12672	0.65602	1.141	0.74543	1.342	0.88006
1.44	0.13093	0.6504	1.148	0.74148	1.349	0.87717
1.45	0.13516	0.64485	1.154	0.73758	1.356	0.87428
1.46	0.13939	0.63937	1.161	0.73374	1.363	0.87138
1.47	0.14364	0.63397	1.168	0.72996	1.37	0.86849
1.48	0.14789	0.62863	1.175	0.72624	1.377	0.8656
1.49	0.15214	0.62337	1.182	0.72257	1.384	0.86271
1.5	0.1564	0.61817	1.189	0.71896	1.391	0.85981
1.51	0.16066	0.61305	1.197	0.71541	1.398	0.85692
1.52	0.16492	0.60798	1.205	0.7119	1.405	0.85403
1.53	0.16919	0.60299	1.212	0.70845	1.412	0.85114
1.54	0.17345	0.59805	1.22	0.70505	1.418	0.84825
1.55	0.17771	0.59318	1.228	0.7017	1.425	0.84536
1.56	0.18197	0.58837	1.237	0.69839	1.432	0.84247
1.57	0.18622	0.58362	1.245	0.69514	1.439	0.83958
1.58	0.19047	0.57893	1.254	0.69193	1.445	0.83669
1.59	0.19471	0.5743	1.262	0.68876	1.452	0.83381
1.6	0.19895	0.56972	1.271	0.68564	1.458	0.83092
1.61	0.20318	0.5652	1.28	0.68257	1.465	0.82804
1.62	0.2074	0.56073	1.289	0.67954	1.472	0.82517
1.63	0.21162	0.55632	1.299	0.67655	1.478	0.82229
1.64	0.21582	0.55196	1.308	0.6736	1.485	0.81942
1.65	0.22001	0.54765	1.318	0.6707	1.491	0.81654
1.66	0.2242	0.5434	1.328	0.66783	1.497	0.81368
1.67	0.22837	0.53919	1.338	0.665	1.504	0.81081
1.68	0.23253	0.53504	1.348	0.66222	1.51	0.80795
1.69	0.23668	0.53093	1.358	0.65946	1.516	0.80509
1.7	0.24081	0.52687	1.369	0.65675	1.523	0.80223
1.71	0.24493	0.52285	1.38	0.65407	1.529	0.79938
1.72	0.24904	0.51889	1.391	0.65143	1.535	0.79653
1.73	0.25314	0.51497	1.402	0.64883	1.541	0.79369

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
1.74	0.25722	0.51109	1.413	0.64626	1.547	0.79085
1.75	0.26128	0.50726	1.424	0.64372	1.553	0.78801
1.76	0.26533	0.50347	1.436	0.64122	1.56	0.78518
1.77	0.26936	0.49972	1.448	0.63874	1.566	0.78235
1.78	0.27338	0.49601	1.46	0.63631	1.572	0.77952
1.79	0.27738	0.49235	1.472	0.6339	1.578	0.7767
1.8	0.28137	0.48873	1.484	0.63152	1.583	0.77389
1.81	0.28533	0.48514	1.497	0.62918	1.589	0.77108
1.82	0.28929	0.4816	1.509	0.62686	1.595	0.76827
1.83	0.29322	0.4781	1.522	0.62457	1.601	0.76548
1.84	0.29714	0.47463	1.535	0.62232	1.607	0.76268
1.85	0.30103	0.4712	1.549	0.62009	1.613	0.75989
1.86	0.30491	0.46781	1.562	0.61789	1.618	0.75711
1.87	0.30878	0.46445	1.576	0.61571	1.624	0.75433
1.88	0.31262	0.46113	1.59	0.61357	1.63	0.75156
1.89	0.31645	0.45784	1.604	0.61145	1.635	0.74879
1.9	0.32025	0.45459	1.618	0.60935	1.641	0.74603
1.91	0.32404	0.45138	1.633	0.60729	1.647	0.74327
1.92	0.32781	0.4482	1.647	0.60524	1.652	0.74052
1.93	0.33156	0.44505	1.662	0.60323	1.658	0.73778
1.94	0.33529	0.44193	1.678	0.60123	1.663	0.73504
1.95	0.33901	0.43885	1.693	0.59926	1.669	0.73231
1.96	0.3427	0.43579	1.709	0.59732	1.674	0.72958
1.97	0.34637	0.43277	1.724	0.5954	1.68	0.72687
1.98	0.35003	0.42978	1.74	0.5935	1.685	0.72415
1.99	0.35366	0.42682	1.757	0.59162	1.69	0.72145
2	0.35728	0.4239	1.773	0.58977	1.696	0.71875
2.01	0.36087	0.421	1.79	0.58794	1.701	0.71606
2.02	0.36445	0.41813	1.807	0.58613	1.706	0.71337
2.03	0.36801	0.41528	1.824	0.58434	1.711	0.71069
2.04	0.37154	0.41247	1.842	0.58257	1.717	0.70802
2.05	0.37506	0.40969	1.859	0.58082	1.722	0.70536

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
2.06	0.37856	0.40693	1.877	0.57909	1.727	0.7027
2.07	0.38204	0.4042	1.895	0.57738	1.732	0.70005
2.08	0.3855	0.4015	1.914	0.5757	1.737	0.69741
2.09	0.38894	0.39882	1.933	0.57403	1.742	0.69477
2.1	0.39235	0.39617	1.951	0.57238	1.747	0.69215
2.11	0.39575	0.39354	1.971	0.57075	1.752	0.68952
2.12	0.39913	0.39094	1.99	0.56913	1.757	0.68691
2.13	0.40249	0.38837	2.01	0.56754	1.762	0.68431
2.14	0.40584	0.38582	2.03	0.56596	1.767	0.68171
2.15	0.40916	0.3833	2.05	0.5644	1.772	0.67912
2.16	0.41246	0.38079	2.071	0.56286	1.777	0.67653
2.17	0.41574	0.37832	2.091	0.56134	1.781	0.67396
2.18	0.419	0.37586	2.113	0.55983	1.786	0.67139
2.19	0.42225	0.37343	2.134	0.55834	1.791	0.66883
2.2	0.42547	0.37103	2.156	0.55686	1.796	0.66628
2.21	0.42868	0.36864	2.177	0.55541	1.8	0.66374
2.22	0.43186	0.36628	2.2	0.55396	1.805	0.6612
2.23	0.43503	0.36394	2.222	0.55254	1.81	0.65867
2.24	0.43817	0.36162	2.245	0.55112	1.814	0.65615
2.25	0.4413	0.35932	2.268	0.54973	1.819	0.65364
2.26	0.44441	0.35705	2.292	0.54835	1.824	0.65114
2.27	0.4475	0.35479	2.315	0.54698	1.828	0.64864
2.28	0.45057	0.35256	2.339	0.54563	1.833	0.64615
2.29	0.45363	0.35035	2.364	0.54429	1.837	0.64368
2.3	0.45666	0.34815	2.388	0.54297	1.842	0.6412
2.31	0.45968	0.34598	2.413	0.54166	1.846	0.63874
2.32	0.46267	0.34383	2.439	0.54036	1.851	0.63629
2.33	0.46565	0.34169	2.464	0.53908	1.855	0.63384
2.34	0.46861	0.33958	2.49	0.53781	1.859	0.6314
2.35	0.47155	0.33748	2.517	0.53656	1.864	0.62897
2.36	0.47447	0.3354	2.543	0.53531	1.868	0.62655
2.37	0.47738	0.33334	2.57	0.53409	1.872	0.62414

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
2.38	0.48027	0.3313	2.598	0.53287	1.877	0.62174
2.39	0.48314	0.32928	2.625	0.53166	1.881	0.61934
2.4	0.48599	0.32728	2.654	0.53047	1.885	0.61695
2.41	0.48882	0.32529	2.682	0.52929	1.889	0.61457
2.42	0.49163	0.32332	2.711	0.52812	1.893	0.6122
2.43	0.49443	0.32137	2.74	0.52697	1.898	0.60984
2.44	0.49721	0.31943	2.769	0.52582	1.902	0.60749
2.45	0.49997	0.31751	2.799	0.52469	1.906	0.60514
2.46	0.50272	0.31561	2.83	0.52357	1.91	0.60281
2.47	0.50545	0.31373	2.86	0.52246	1.914	0.60048
2.48	0.50816	0.31186	2.891	0.52136	1.918	0.59816
2.49	0.51085	0.31001	2.923	0.52027	1.922	0.59585
2.5	0.51353	0.30817	2.954	0.5192	1.926	0.59355
2.51	0.51619	0.30635	2.987	0.51813	1.93	0.59126
2.52	0.51883	0.30454	3.019	0.51707	1.934	0.58897
2.53	0.52146	0.30275	3.052	0.51603	1.938	0.58669
2.54	0.52407	0.30098	3.086	0.51499	1.942	0.58443
2.55	0.52666	0.29922	3.12	0.51397	1.946	0.58217
2.56	0.52923	0.29747	3.154	0.51295	1.949	0.57992
2.57	0.53179	0.29574	3.189	0.51195	1.953	0.57768
2.58	0.53434	0.29402	3.224	0.51095	1.957	0.57544
2.59	0.53687	0.29232	3.259	0.50996	1.961	0.57322
2.6	0.53938	0.29063	3.295	0.50899	1.965	0.571
2.61	0.54187	0.28896	3.332	0.50802	1.968	0.5688
2.62	0.54435	0.2873	3.369	0.50706	1.972	0.5666
2.63	0.54682	0.28565	3.406	0.50611	1.976	0.56441
2.64	0.54926	0.28402	3.444	0.50517	1.98	0.56223
2.65	0.5517	0.2824	3.482	0.50424	1.983	0.56005
2.66	0.55411	0.2808	3.521	0.50332	1.987	0.55789
2.67	0.55651	0.2792	3.56	0.50241	1.99	0.55573
2.68	0.5589	0.27762	3.6	0.5015	1.994	0.55359
2.69	0.56127	0.27606	3.64	0.5006	1.998	0.55145

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
2.7	0.56363	0.2745	3.681	0.49972	2.001	0.54932
2.71	0.56597	0.27296	3.722	0.49884	2.005	0.5472
2.72	0.5683	0.27143	3.764	0.49796	2.008	0.54509
2.73	0.57061	0.26992	3.806	0.4971	2.012	0.54298
2.74	0.5729	0.26841	3.849	0.49625	2.015	0.54089
2.75	0.57518	0.26692	3.892	0.4954	2.019	0.5388
2.76	0.57745	0.26544	3.936	0.49456	2.022	0.53672
2.77	0.5797	0.26397	3.98	0.49372	2.025	0.53465
2.78	0.58194	0.26251	4.025	0.4929	2.029	0.53259
2.79	0.58417	0.26107	4.071	0.49208	2.032	0.53054
2.8	0.58638	0.25963	4.116	0.49127	2.036	0.52849
2.81	0.58857	0.25821	4.163	0.49047	2.039	0.52646
2.82	0.59076	0.2568	4.21	0.48967	2.042	0.52443
2.83	0.59292	0.2554	4.258	0.48889	2.045	0.52241
2.84	0.59508	0.25401	4.306	0.4881	2.049	0.5204
2.85	0.59722	0.25263	4.355	0.48733	2.052	0.5184
2.86	0.59935	0.25126	4.404	0.48656	2.055	0.5164
2.87	0.60146	0.24991	4.454	0.4858	2.058	0.51442
2.88	0.60356	0.24856	4.504	0.48505	2.062	0.51244
2.89	0.60565	0.24722	4.556	0.4843	2.065	0.51047
2.9	0.60772	0.2459	4.607	0.48356	2.068	0.50851
2.91	0.60978	0.24458	4.66	0.48283	2.071	0.50656
2.92	0.61183	0.24328	4.713	0.4821	2.074	0.50462
2.93	0.61386	0.24198	4.766	0.48138	2.077	0.50268
2.94	0.61588	0.24069	4.821	0.48066	2.08	0.50075
2.95	0.61789	0.23942	4.875	0.47995	2.084	0.49883
2.96	0.61989	0.23815	4.931	0.47925	2.087	0.49692
2.97	0.62187	0.23689	4.987	0.47855	2.09	0.49502
2.98	0.62384	0.23565	5.044	0.47786	2.093	0.49313
2.99	0.6258	0.23441	5.102	0.47718	2.096	0.49124
3	0.62774	0.23318	5.16	0.4765	2.099	0.48936
3.01	0.62968	0.23196	5.219	0.47583	2.102	0.48749

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
3.02	0.6316	0.23075	5.278	0.47516	2.105	0.48563
3.03	0.63351	0.22955	5.339	0.4745	2.107	0.48378
3.04	0.63541	0.22836	5.4	0.47384	2.11	0.48193
3.05	0.63729	0.22718	5.461	0.47319	2.113	0.48009
3.06	0.63917	0.226	5.524	0.47255	2.116	0.47826
3.07	0.64103	0.22484	5.587	0.47191	2.119	0.47644
3.08	0.64288	0.22368	5.651	0.47127	2.122	0.47463
3.09	0.64472	0.22253	5.715	0.47065	2.125	0.47282
3.1	0.64654	0.22139	5.781	0.47002	2.128	0.47102
3.11	0.64836	0.22026	5.847	0.4694	2.13	0.46923
3.12	0.65016	0.21914	5.914	0.46879	2.133	0.46745
3.13	0.65195	0.21802	5.981	0.46818	2.136	0.46567
3.14	0.65374	0.21691	6.05	0.46758	2.139	0.46391
3.15	0.65551	0.21581	6.119	0.46698	2.141	0.46215
3.16	0.65727	0.21472	6.189	0.46639	2.144	0.4604
3.17	0.65901	0.21364	6.26	0.4658	2.147	0.45865
3.18	0.66075	0.21257	6.332	0.46521	2.15	0.45692
3.19	0.66248	0.2115	6.404	0.46464	2.152	0.45519
3.2	0.66419	0.21044	6.478	0.46406	2.155	0.45347
3.21	0.6659	0.20939	6.552	0.46349	2.158	0.45176
3.22	0.66759	0.20834	6.627	0.46293	2.16	0.45005
3.23	0.66928	0.2073	6.703	0.46237	2.163	0.44835
3.24	0.67095	0.20627	6.779	0.46181	2.165	0.44666
3.25	0.67262	0.20525	6.857	0.46126	2.168	0.44498
3.26	0.67427	0.20424	6.936	0.46071	2.171	0.44331
3.27	0.67591	0.20323	7.015	0.46017	2.173	0.44164
3.28	0.67754	0.20223	7.095	0.45963	2.176	0.43998
3.29	0.67917	0.20123	7.177	0.4591	2.178	0.43833
3.3	0.68078	0.20025	7.259	0.45857	2.181	0.43668
3.31	0.68238	0.19927	7.342	0.45804	2.183	0.43504
3.32	0.68398	0.1983	7.426	0.45752	2.186	0.43341
3.33	0.68556	0.19733	7.511	0.457	2.188	0.43179

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
3.34	0.68713	0.19637	7.597	0.45649	2.191	0.43017
3.35	0.6887	0.19542	7.683	0.45598	2.193	0.42856
3.36	0.69025	0.19447	7.771	0.45548	2.196	0.42696
3.37	0.6918	0.19353	7.86	0.45497	2.198	0.42537
3.38	0.69333	0.1926	7.95	0.45448	2.2	0.42378
3.39	0.69486	0.19167	8.041	0.45398	2.203	0.4222
3.4	0.69637	0.19075	8.133	0.45349	2.205	0.42063
3.41	0.69788	0.18984	8.226	0.45301	2.207	0.41906
3.42	0.69938	0.18893	8.32	0.45253	2.21	0.4175
3.43	0.70087	0.18803	8.415	0.45205	2.212	0.41595
3.44	0.70235	0.18714	8.511	0.45157	2.214	0.41441
3.45	0.70382	0.18625	8.608	0.4511	2.217	0.41287
3.46	0.70528	0.18536	8.706	0.45063	2.219	0.41134
3.47	0.70673	0.18449	8.805	0.45017	2.221	0.40982
3.48	0.70818	0.18362	8.906	0.44971	2.224	0.4083
3.49	0.70961	0.18275	9.007	0.44925	2.226	0.40679
3.5	0.71104	0.18189	9.11	0.4488	2.228	0.40529
3.51	0.71246	0.18104	9.214	0.44835	2.23	0.40379
3.52	0.71387	0.18019	9.319	0.4479	2.233	0.4023
3.53	0.71527	0.17935	9.425	0.44746	2.235	0.40082
3.54	0.71666	0.17851	9.532	0.44702	2.237	0.39934
3.55	0.71805	0.17768	9.64	0.44658	2.239	0.39787
3.56	0.71942	0.17686	9.75	0.44615	2.241	0.39641
3.57	0.72079	0.17604	9.861	0.44572	2.244	0.39495
3.58	0.72215	0.17522	9.973	0.44529	2.246	0.3935
3.59	0.7235	0.17441	10.09	0.44487	2.248	0.39206
3.6	0.72485	0.17361	10.2	0.44444	2.25	0.39063
3.61	0.72618	0.17281	10.32	0.44403	2.252	0.3892
3.62	0.72751	0.17202	10.43	0.44361	2.254	0.38777
3.63	0.72883	0.17123	10.55	0.4432	2.256	0.38636
3.64	0.73014	0.17045	10.67	0.44279	2.258	0.38494
3.65	0.73145	0.16967	10.79	0.44239	2.26	0.38354

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
3.66	0.73274	0.1689	10.91	0.44198	2.263	0.38214
3.67	0.73403	0.16813	11.04	0.44158	2.265	0.38075
3.68	0.73531	0.16737	11.16	0.44119	2.267	0.37937
3.69	0.73658	0.16661	11.29	0.44079	2.269	0.37799
3.7	0.73785	0.16586	11.42	0.4404	2.271	0.37662
3.71	0.73911	0.16512	11.54	0.44001	2.273	0.37525
3.72	0.74036	0.16437	11.68	0.43963	2.275	0.37389
3.73	0.7416	0.16364	11.81	0.43924	2.277	0.37254
3.74	0.74284	0.1629	11.94	0.43886	2.279	0.37119
3.75	0.74407	0.16217	12.07	0.43849	2.281	0.36985
3.76	0.74529	0.16145	12.21	0.43811	2.283	0.36851
3.77	0.74651	0.16073	12.35	0.43774	2.284	0.36719
3.78	0.74771	0.16002	12.49	0.43737	2.286	0.36586
3.79	0.74892	0.15931	12.63	0.437	2.288	0.36455
3.8	0.75011	0.1586	12.77	0.43664	2.29	0.36323
3.81	0.7513	0.1579	12.91	0.43628	2.292	0.36193
3.82	0.75248	0.15721	13.06	0.43592	2.294	0.36063
3.83	0.75365	0.15651	13.2	0.43556	2.296	0.35934
3.84	0.75481	0.15583	13.35	0.43521	2.298	0.35805
3.85	0.75597	0.15514	13.5	0.43486	2.3	0.35677
3.86	0.75713	0.15446	13.65	0.43451	2.301	0.35549
3.87	0.75827	0.15379	13.81	0.43416	2.303	0.35422
3.88	0.75941	0.15312	13.96	0.43382	2.305	0.35296
3.89	0.76055	0.15245	14.12	0.43347	2.307	0.3517
3.9	0.76167	0.15179	14.27	0.43313	2.309	0.35045
3.91	0.76279	0.15113	14.43	0.4328	2.311	0.3492
3.92	0.7639	0.15048	14.59	0.43246	2.312	0.34796
3.93	0.76501	0.14983	14.76	0.43213	2.314	0.34673
3.94	0.76611	0.14919	14.92	0.4318	2.316	0.3455
3.95	0.76721	0.14854	15.09	0.43147	2.318	0.34427
3.96	0.76829	0.14791	15.26	0.43115	2.319	0.34305
3.97	0.76938	0.14727	15.42	0.43082	2.321	0.34184

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
3.98	0.77045	0.14664	15.6	0.4305	2.323	0.34063
3.99	0.77152	0.14602	15.77	0.43018	2.325	0.33943
4	0.77259	0.14539	15.94	0.42986	2.326	0.33824
4.01	0.77364	0.14478	16.12	0.42955	2.328	0.33704
4.02	0.77469	0.14416	16.3	0.42924	2.33	0.33586
4.03	0.77574	0.14355	16.48	0.42892	2.331	0.33468
4.04	0.77678	0.14294	16.66	0.42862	2.333	0.3335
4.05	0.77781	0.14234	16.85	0.42831	2.335	0.33233
4.06	0.77884	0.14174	17.03	0.428	2.336	0.33117
4.07	0.77986	0.14115	17.22	0.4277	2.338	0.33001
4.08	0.78088	0.14055	17.41	0.4274	2.34	0.32886
4.09	0.78189	0.13997	17.6	0.4271	2.341	0.32771
4.1	0.7829	0.13938	17.8	0.42681	2.343	0.32657
4.11	0.7839	0.1388	17.99	0.42651	2.345	0.32543
4.12	0.78489	0.13822	18.19	0.42622	2.346	0.32429
4.13	0.78588	0.13765	18.39	0.42593	2.348	0.32317
4.14	0.78686	0.13707	18.59	0.42564	2.349	0.32204
4.15	0.78784	0.13651	18.8	0.42535	2.351	0.32093
4.16	0.78881	0.13594	19	0.42507	2.353	0.31981
4.17	0.78978	0.13538	19.21	0.42478	2.354	0.31871
4.18	0.79074	0.13482	19.42	0.4245	2.356	0.3176
4.19	0.79169	0.13427	19.63	0.42422	2.357	0.31651
4.2	0.79264	0.13372	19.85	0.42395	2.359	0.31541
4.21	0.79359	0.13317	20.06	0.42367	2.36	0.31433
4.22	0.79453	0.13263	20.28	0.4234	2.362	0.31324
4.23	0.79546	0.13208	20.5	0.42312	2.363	0.31217
4.24	0.79639	0.13155	20.73	0.42285	2.365	0.31109
4.25	0.79732	0.13101	20.95	0.42258	2.366	0.31003
4.26	0.79823	0.13048	21.18	0.42232	2.368	0.30896
4.27	0.79915	0.12995	21.41	0.42205	2.369	0.3079
4.28	0.80006	0.12943	21.64	0.42179	2.371	0.30685
4.29	0.80096	0.1289	21.88	0.42152	2.372	0.3058

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
4.3	0.80186	0.12838	22.12	0.42126	2.374	0.30476
4.31	0.80276	0.12787	22.36	0.42101	2.375	0.30372
4.32	0.80365	0.12735	22.6	0.42075	2.377	0.30268
4.33	0.80453	0.12684	22.84	0.42049	2.378	0.30165
4.34	0.80541	0.12634	23.09	0.42024	2.38	0.30063
4.35	0.80629	0.12583	23.34	0.41999	2.381	0.29961
4.36	0.80716	0.12533	23.59	0.41974	2.382	0.29859
4.37	0.80802	0.12483	23.84	0.41949	2.384	0.29758
4.38	0.80888	0.12433	24.1	0.41924	2.385	0.29657
4.39	0.80974	0.12384	24.36	0.41899	2.387	0.29557
4.4	0.81059	0.12335	24.62	0.41875	2.388	0.29457
4.41	0.81144	0.12286	24.89	0.41851	2.389	0.29358
4.42	0.81228	0.12238	25.15	0.41826	2.391	0.29259
4.43	0.81312	0.1219	25.42	0.41802	2.392	0.2916
4.44	0.81395	0.12142	25.7	0.41779	2.394	0.29062
4.45	0.81478	0.12094	25.97	0.41755	2.395	0.28965
4.46	0.81561	0.12047	26.25	0.41731	2.396	0.28867
4.47	0.81643	0.12	26.53	0.41708	2.398	0.28771
4.48	0.81724	0.11953	26.81	0.41685	2.399	0.28674
4.49	0.81805	0.11906	27.1	0.41661	2.4	0.28578
4.5	0.81886	0.1186	27.39	0.41638	2.402	0.28483
4.51	0.81966	0.11814	27.68	0.41616	2.403	0.28388
4.52	0.82046	0.11768	27.97	0.41593	2.404	0.28293
4.53	0.82126	0.11722	28.27	0.4157	2.406	0.28199
4.54	0.82205	0.11677	28.57	0.41548	2.407	0.28105
4.55	0.82283	0.11632	28.87	0.41526	2.408	0.28012
4.56	0.82361	0.11587	29.18	0.41503	2.409	0.27919
4.57	0.82439	0.11543	29.49	0.41481	2.411	0.27827
4.58	0.82516	0.11499	29.8	0.4146	2.412	0.27735
4.59	0.82593	0.11455	30.12	0.41438	2.413	0.27643
4.6	0.8267	0.11411	30.43	0.41416	2.415	0.27552
4.61	0.82746	0.11367	30.75	0.41395	2.416	0.27461

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
4.62	0.82822	0.11324	31.08	0.41373	2.417	0.2737
4.63	0.82897	0.11281	31.41	0.41352	2.418	0.2728
4.64	0.82972	0.11238	31.74	0.41331	2.419	0.2719
4.65	0.83047	0.11195	32.07	0.4131	2.421	0.27101
4.66	0.83121	0.11153	32.41	0.41289	2.422	0.27012
4.67	0.83195	0.11111	32.75	0.41268	2.423	0.26924
4.68	0.83268	0.11069	33.09	0.41248	2.424	0.26836
4.69	0.83341	0.11027	33.44	0.41227	2.426	0.26748
4.7	0.83414	0.10986	33.79	0.41207	2.427	0.2666
4.71	0.83486	0.10945	34.14	0.41186	2.428	0.26574
4.72	0.83558	0.10904	34.5	0.41166	2.429	0.26487
4.73	0.83629	0.10863	34.86	0.41146	2.43	0.26401
4.74	0.837	0.10822	35.22	0.41126	2.432	0.26315
4.75	0.83771	0.10782	35.59	0.41107	2.433	0.2623
4.76	0.83842	0.10742	35.96	0.41087	2.434	0.26144
4.77	0.83912	0.10702	36.33	0.41067	2.435	0.2606
4.78	0.83981	0.10662	36.71	0.41048	2.436	0.25975
4.79	0.84051	0.10623	37.09	0.41029	2.437	0.25891
4.8	0.8412	0.10584	37.47	0.41009	2.438	0.25808
4.81	0.84188	0.10545	37.86	0.4099	2.44	0.25725
4.82	0.84257	0.10506	38.25	0.40971	2.441	0.25642
4.83	0.84325	0.10467	38.65	0.40952	2.442	0.25559
4.84	0.84392	0.10429	39.05	0.40933	2.443	0.25477
4.85	0.84459	0.1039	39.45	0.40915	2.444	0.25395
4.86	0.84526	0.10352	39.85	0.40896	2.445	0.25314
4.87	0.84593	0.10315	40.26	0.40878	2.446	0.25233
4.88	0.84659	0.10277	40.68	0.40859	2.447	0.25152
4.89	0.84725	0.1024	41.1	0.40841	2.449	0.25072
4.9	0.84791	0.10202	41.52	0.40823	2.45	0.24992
4.91	0.84856	0.10165	41.94	0.40805	2.451	0.24912
4.92	0.84921	0.10129	42.37	0.40787	2.452	0.24833
4.93	0.84985	0.10092	42.81	0.40769	2.453	0.24754

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
4.94	0.85049	0.10056	43.25	0.40751	2.454	0.24675
4.95	0.85113	0.10019	43.69	0.40734	2.455	0.24597
4.96	0.85177	0.099832	44.13	0.40716	2.456	0.24519
4.97	0.8524	0.099473	44.58	0.40699	2.457	0.24441
4.98	0.85303	0.099116	45.04	0.40681	2.458	0.24364
4.99	0.85366	0.098762	45.49	0.40664	2.459	0.24287
5	0.85428	0.098408	45.96	0.40647	2.46	0.24211
5.02	0.85552	0.097708	46.89	0.40613	2.462	0.24058
5.04	0.85675	0.097014	47.85	0.40579	2.464	0.23907
5.06	0.85796	0.096328	48.82	0.40546	2.466	0.23758
5.08	0.85916	0.095648	49.81	0.40513	2.468	0.23609
5.1	0.86035	0.094976	50.82	0.4048	2.47	0.23462
5.12	0.86153	0.094311	51.84	0.40448	2.472	0.23316
5.14	0.86269	0.093652	52.89	0.40416	2.474	0.23172
5.16	0.86385	0.093	53.95	0.40385	2.476	0.23028
5.18	0.86499	0.092354	55.03	0.40354	2.478	0.22886
5.2	0.86612	0.091715	56.14	0.40323	2.48	0.22745
5.22	0.86725	0.091083	57.26	0.40292	2.482	0.22605
5.24	0.86836	0.090457	58.4	0.40262	2.484	0.22467
5.26	0.86946	0.089837	59.56	0.40232	2.486	0.22329
5.28	0.87055	0.089223	60.75	0.40203	2.487	0.22193
5.3	0.87163	0.088615	61.95	0.40174	2.489	0.22058
5.32	0.87269	0.088014	63.18	0.40145	2.491	0.21924
5.34	0.87375	0.087418	64.42	0.40116	2.493	0.21791
5.36	0.8748	0.086828	65.69	0.40088	2.495	0.2166
5.38	0.87584	0.086244	66.98	0.4006	2.496	0.21529
5.4	0.87687	0.085666	68.3	0.40032	2.498	0.21399
5.42	0.87789	0.085093	69.63	0.40004	2.5	0.21271
5.44	0.8789	0.084526	71	0.39977	2.501	0.21143
5.46	0.8799	0.083964	72.38	0.3995	2.503	0.21017
5.48	0.88089	0.083408	73.79	0.39924	2.505	0.20892
5.5	0.88187	0.082857	75.22	0.39897	2.506	0.20767

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
5.52	0.88284	0.082311	76.68	0.39871	2.508	0.20644
5.54	0.8838	0.081771	78.16	0.39846	2.51	0.20522
5.56	0.88476	0.081236	79.67	0.3982	2.511	0.20401
5.58	0.8857	0.080706	81.2	0.39795	2.513	0.20281
5.6	0.88664	0.080181	82.76	0.3977	2.514	0.20161
5.62	0.88757	0.079661	84.35	0.39745	2.516	0.20043
5.64	0.88849	0.079146	85.96	0.3972	2.518	0.19926
5.66	0.8894	0.078636	87.6	0.39696	2.519	0.19809
5.68	0.8903	0.07813	89.27	0.39672	2.521	0.19694
5.7	0.8912	0.077629	90.97	0.39648	2.522	0.19579
5.72	0.89209	0.077133	92.69	0.39625	2.524	0.19466
5.74	0.89296	0.076642	94.45	0.39601	2.525	0.19353
5.76	0.89384	0.076155	96.23	0.39578	2.527	0.19242
5.78	0.8947	0.075673	98.05	0.39555	2.528	0.19131
5.8	0.89555	0.075195	99.89	0.39533	2.53	0.19021
5.82	0.8964	0.074721	$1.0E{+}02$	0.3951	2.531	0.18912
5.84	0.89724	0.074252	$1.0E{+}02$	0.39488	2.532	0.18804
5.86	0.89807	0.073787	$1.1E{+}02$	0.39466	2.534	0.18696
5.88	0.8989	0.073327	$1.1E{+}02$	0.39444	2.535	0.1859
5.9	0.89972	0.07287	$1.1E{+}02$	0.39423	2.537	0.18484
5.92	0.90053	0.072418	$1.1E{+}02$	0.39401	2.538	0.1838
5.94	0.90133	0.07197	$1.1E{+}02$	0.3938	2.539	0.18276
5.96	0.90213	0.071526	$1.2E{+}02$	0.39359	2.541	0.18173
5.98	0.90292	0.071085	$1.2E{+}02$	0.39338	2.542	0.1807
6	0.9037	0.070649	$1.2E{+}02$	0.39318	2.543	0.17969
6.02	0.90447	0.070217	$1.2E{+}02$	0.39297	2.545	0.17868
6.04	0.90524	0.069789	$1.2E{+}02$	0.39277	2.546	0.17768
6.06	0.90601	0.069364	$1.3E{+}02$	0.39257	2.547	0.17669
6.08	0.90676	0.068943	$1.3E{+}02$	0.39237	2.549	0.17571
6.1	0.90751	0.068526	$1.3E{+}02$	0.39218	2.55	0.17473
6.12	0.90825	0.068113	$1.3E{+}02$	0.39198	2.551	0.17376
6.14	0.90899	0.067703	$1.4E{+}02$	0.39179	2.552	0.1728

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
6.16	0.90972	0.067297	1.4E+02	0.3916	2.554	0.17185
6.18	0.91044	0.066894	1.4E+02	0.39141	2.555	0.17091
6.2	0.91116	0.066495	1.4E+02	0.39122	2.556	0.16997
6.22	0.91187	0.0661	1.5E+02	0.39104	2.557	0.16904
6.24	0.91258	0.065708	1.5E+02	0.39085	2.558	0.16811
6.26	0.91328	0.065319	1.5E+02	0.39067	2.56	0.1672
6.28	0.91397	0.064934	1.5E+02	0.39049	2.561	0.16629
6.3	0.91466	0.064552	1.6E+02	0.39031	2.562	0.16538
6.32	0.91534	0.064173	1.6E+02	0.39013	2.563	0.16449
6.34	0.91601	0.063797	1.6E+02	0.38996	2.564	0.1636
6.36	0.91669	0.063425	1.7E+02	0.38978	2.566	0.16272
6.38	0.91735	0.063056	1.7E+02	0.38961	2.567	0.16184
6.4	0.91801	0.06269	1.7E+02	0.38944	2.568	0.16097
6.42	0.91866	0.062327	1.7E+02	0.38927	2.569	0.16011
6.44	0.91931	0.061967	1.8E+02	0.3891	2.57	0.15926
6.46	0.91995	0.061611	1.8E+02	0.38894	2.571	0.15841
6.48	0.92059	0.061257	1.8E+02	0.38877	2.572	0.15757
6.5	0.92122	0.060906	1.9E+02	0.38861	2.573	0.15673
6.52	0.92185	0.060558	1.9E+02	0.38845	2.574	0.1559
6.54	0.92247	0.060214	1.9E+02	0.38828	2.575	0.15508
6.56	0.92309	0.059871	2.0E+02	0.38813	2.576	0.15426
6.58	0.9237	0.059532	2.0E+02	0.38797	2.578	0.15345
6.6	0.92431	0.059196	2.0E+02	0.38781	2.579	0.15264
6.62	0.92491	0.058862	2.1E+02	0.38766	2.58	0.15184
6.64	0.92551	0.058532	2.1E+02	0.3875	2.581	0.15105
6.66	0.9261	0.058204	2.1E+02	0.38735	2.582	0.15026
6.68	0.92669	0.057878	2.2E+02	0.3872	2.583	0.14948
6.7	0.92727	0.057555	2.2E+02	0.38705	2.584	0.1487
6.72	0.92785	0.057235	2.3E+02	0.3869	2.585	0.14793
6.74	0.92842	0.056918	2.3E+02	0.38675	2.586	0.14717
6.76	0.92899	0.056603	2.3E+02	0.38661	2.587	0.14641
6.78	0.92956	0.056291	2.4E+02	0.38646	2.588	0.14566

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
6.8	0.93012	0.055981	2.4E+02	0.38632	2.589	0.14491
6.82	0.93067	0.055674	2.5E+02	0.38617	2.59	0.14417
6.84	0.93123	0.055369	2.5E+02	0.38603	2.59	0.14343
6.86	0.93177	0.055066	2.5E+02	0.38589	2.591	0.1427
6.88	0.93231	0.054766	2.6E+02	0.38575	2.592	0.14197
6.9	0.93285	0.054469	2.6E+02	0.38562	2.593	0.14125
6.92	0.93339	0.054174	2.7E+02	0.38548	2.594	0.14054
6.94	0.93392	0.053881	2.7E+02	0.38534	2.595	0.13983
6.96	0.93444	0.05359	2.8E+02	0.38521	2.596	0.13912
6.98	0.93496	0.053302	2.8E+02	0.38508	2.597	0.13842
7	0.93548	0.053016	2.9E+02	0.38494	2.598	0.13772
7.02	0.936	0.052732	2.9E+02	0.38481	2.599	0.13703
7.04	0.93651	0.052451	2.9E+02	0.38468	2.6	0.13635
7.06	0.93701	0.052172	3.0E+02	0.38455	2.6	0.13567
7.08	0.93751	0.051895	3.0E+02	0.38442	2.601	0.13499
7.1	0.93801	0.05162	3.1E+02	0.3843	2.602	0.13432
7.12	0.93851	0.051347	3.1E+02	0.38417	2.603	0.13366
7.14	0.939	0.051076	3.2E+02	0.38405	2.604	0.133
7.16	0.93948	0.050808	3.3E+02	0.38392	2.605	0.13234
7.18	0.93997	0.050541	3.3E+02	0.3838	2.606	0.13169
7.2	0.94045	0.050277	3.4E+02	0.38368	2.606	0.13104
7.22	0.94092	0.050014	3.4E+02	0.38356	2.607	0.1304
7.24	0.94139	0.049754	3.5E+02	0.38344	2.608	0.12976
7.26	0.94186	0.049496	3.5E+02	0.38332	2.609	0.12912
7.28	0.94233	0.049239	3.6E+02	0.3832	2.61	0.1285
7.3	0.94279	0.048985	3.6E+02	0.38308	2.61	0.12787
7.32	0.94325	0.048732	3.7E+02	0.38297	2.611	0.12725
7.34	0.9437	0.048482	3.8E+02	0.38285	2.612	0.12663
7.36	0.94415	0.048233	3.8E+02	0.38274	2.613	0.12602
7.38	0.9446	0.047986	3.9E+02	0.38262	2.614	0.12541
7.4	0.94505	0.047741	3.9E+02	0.38251	2.614	0.12481
7.42	0.94549	0.047498	4.0E+02	0.3824	2.615	0.12421

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
7.44	0.94592	0.047257	4.1E+02	0.38229	2.616	0.12362
7.46	0.94636	0.047017	4.1E+02	0.38218	2.617	0.12302
7.48	0.94679	0.046779	4.2E+02	0.38207	2.617	0.12244
7.5	0.94722	0.046544	4.3E+02	0.38196	2.618	0.12185
7.52	0.94765	0.046309	4.3E+02	0.38185	2.619	0.12128
7.54	0.94807	0.046077	4.4E+02	0.38175	2.62	0.1207
7.56	0.94849	0.045846	4.5E+02	0.38164	2.62	0.12013
7.58	0.9489	0.045617	4.5E+02	0.38154	2.621	0.11956
7.6	0.94932	0.04539	4.6E+02	0.38143	2.622	0.119
7.62	0.94973	0.045164	4.7E+02	0.38133	2.622	0.11844
7.64	0.95013	0.04494	4.7E+02	0.38122	2.623	0.11788
7.66	0.95054	0.044717	4.8E+02	0.38112	2.624	0.11733
7.68	0.95094	0.044497	4.9E+02	0.38102	2.625	0.11678
7.7	0.95134	0.044278	5.0E+02	0.38092	2.625	0.11624
7.72	0.95173	0.04406	5.0E+02	0.38082	2.626	0.1157
7.74	0.95213	0.043844	5.1E+02	0.38072	2.627	0.11516
7.76	0.95252	0.043629	5.2E+02	0.38062	2.627	0.11463
7.78	0.9529	0.043417	5.3E+02	0.38053	2.628	0.1141
7.8	0.95329	0.043205	5.4E+02	0.38043	2.629	0.11357
7.82	0.95367	0.042995	5.4E+02	0.38033	2.629	0.11305
7.84	0.95405	0.042787	5.5E+02	0.38024	2.63	0.11253
7.86	0.95443	0.04258	5.6E+02	0.38014	2.631	0.11201
7.88	0.9548	0.042375	5.7E+02	0.38005	2.631	0.1115
7.9	0.95517	0.042171	5.8E+02	0.37996	2.632	0.11099
7.92	0.95554	0.041968	5.9E+02	0.37987	2.633	0.11048
7.94	0.95591	0.041767	6.0E+02	0.37977	2.633	0.10998
7.96	0.95627	0.041567	6.0E+02	0.37968	2.634	0.10948
7.98	0.95663	0.041369	6.1E+02	0.37959	2.634	0.10898
8	0.95699	0.041172	6.2E+02	0.3795	2.635	0.10849
8.02	0.95734	0.040977	6.3E+02	0.37941	2.636	0.108
8.04	0.9577	0.040783	6.4E+02	0.37932	2.636	0.10751
8.06	0.95805	0.04059	6.5E+02	0.37924	2.637	0.10703

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
8.08	0.9584	0.040399	$6.6E{+}02$	0.37915	2.637	0.10655
8.1	0.95874	0.040209	$6.7E{+}02$	0.37906	2.638	0.10607
8.12	0.95909	0.04002	$6.8E{+}02$	0.37898	2.639	0.1056
8.14	0.95943	0.039832	$6.9E{+}02$	0.37889	2.639	0.10513
8.16	0.95977	0.039646	$7.0E{+}02$	0.37881	2.64	0.10466
8.18	0.9601	0.039461	$7.1E{+}02$	0.37872	2.64	0.1042
8.2	0.96044	0.039278	$7.2E{+}02$	0.37864	2.641	0.10373
8.22	0.96077	0.039096	$7.3E{+}02$	0.37856	2.642	0.10328
8.24	0.9611	0.038914	$7.4E{+}02$	0.37847	2.642	0.10282
8.26	0.96143	0.038735	$7.5E{+}02$	0.37839	2.643	0.10237
8.28	0.96176	0.038556	$7.7E{+}02$	0.37831	2.643	0.10192
8.3	0.96208	0.038379	$7.8E{+}02$	0.37823	2.644	0.10147
8.32	0.9624	0.038202	$7.9E{+}02$	0.37815	2.644	0.10102
8.34	0.96272	0.038027	$8.0E{+}02$	0.37807	2.645	0.10058
8.36	0.96304	0.037854	$8.1E{+}02$	0.37799	2.646	0.10014
8.38	0.96335	0.037681	$8.2E{+}02$	0.37791	2.646	0.099708
8.4	0.96366	0.037509	$8.3E{+}02$	0.37783	2.647	0.099275
8.42	0.96397	0.037339	$8.5E{+}02$	0.37776	2.647	0.098844
8.44	0.96428	0.03717	$8.6E{+}02$	0.37768	2.648	0.098416
8.46	0.96459	0.037002	$8.7E{+}02$	0.3776	2.648	0.097991
8.48	0.96489	0.036835	$8.8E{+}02$	0.37753	2.649	0.097569
8.5	0.9652	0.036669	$9.0E{+}02$	0.37745	2.649	0.097149
8.52	0.9655	0.036504	$9.1E{+}02$	0.37738	2.65	0.096732
8.54	0.9658	0.036341	$9.2E{+}02$	0.3773	2.65	0.096317
8.56	0.96609	0.036178	$9.3E{+}02$	0.37723	2.651	0.095905
8.58	0.96639	0.036017	$9.5E{+}02$	0.37716	2.651	0.095495
8.6	0.96668	0.035856	$9.6E{+}02$	0.37708	2.652	0.095088
8.62	0.96697	0.035697	$9.7E{+}02$	0.37701	2.652	0.094684
8.64	0.96726	0.035539	$9.9E{+}02$	0.37694	2.653	0.094282
8.66	0.96755	0.035381	$1.0E{+}03$	0.37687	2.653	0.093883
8.68	0.96783	0.035225	$1.0E{+}03$	0.3768	2.654	0.093486
8.7	0.96812	0.03507	$1.0E{+}03$	0.37673	2.654	0.093091

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
8.72	0.9684	0.034916	1.0E+03	0.37666	2.655	0.092699
8.74	0.96868	0.034762	1.1E+03	0.37659	2.655	0.092309
8.76	0.96896	0.03461	1.1E+03	0.37652	2.656	0.091922
8.78	0.96923	0.034459	1.1E+03	0.37645	2.656	0.091537
8.8	0.96951	0.034309	1.1E+03	0.37638	2.657	0.091154
8.82	0.96978	0.03416	1.1E+03	0.37631	2.657	0.090774
8.84	0.97005	0.034011	1.1E+03	0.37625	2.658	0.090396
8.86	0.97032	0.033864	1.2E+03	0.37618	2.658	0.09002
8.88	0.97059	0.033717	1.2E+03	0.37611	2.659	0.089647
8.9	0.97085	0.033572	1.2E+03	0.37605	2.659	0.089275
8.92	0.97112	0.033427	1.2E+03	0.37598	2.66	0.088906
8.94	0.97138	0.033284	1.2E+03	0.37592	2.66	0.08854
8.96	0.97164	0.033141	1.2E+03	0.37585	2.661	0.088175
8.98	0.9719	0.032999	1.2E+03	0.37579	2.661	0.087813
9	0.97216	0.032858	1.3E+03	0.37573	2.662	0.087452
9.02	0.97241	0.032718	1.3E+03	0.37566	2.662	0.087094
9.04	0.97267	0.032579	1.3E+03	0.3756	2.662	0.086739
9.06	0.97292	0.032441	1.3E+03	0.37554	2.663	0.086385
9.08	0.97317	0.032303	1.3E+03	0.37548	2.663	0.086033
9.1	0.97342	0.032167	1.4E+03	0.37541	2.664	0.085683
9.12	0.97367	0.032031	1.4E+03	0.37535	2.664	0.085336
9.14	0.97392	0.031896	1.4E+03	0.37529	2.665	0.08499
9.16	0.97416	0.031762	1.4E+03	0.37523	2.665	0.084647
9.18	0.9744	0.031629	1.4E+03	0.37517	2.665	0.084306
9.2	0.97465	0.031497	1.4E+03	0.37511	2.666	0.083966
9.22	0.97489	0.031365	1.5E+03	0.37505	2.666	0.083629
9.24	0.97513	0.031234	1.5E+03	0.37499	2.667	0.083293
9.26	0.97536	0.031104	1.5E+03	0.37493	2.667	0.08296
9.28	0.9756	0.030975	1.5E+03	0.37488	2.668	0.082628
9.3	0.97583	0.030847	1.5E+03	0.37482	2.668	0.082299
9.32	0.97607	0.030719	1.6E+03	0.37476	2.668	0.081971
9.34	0.9763	0.030593	1.6E+03	0.3747	2.669	0.081645

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
9.36	0.97653	0.030467	1.6E+03	0.37465	2.669	0.081321
9.38	0.97676	0.030342	1.6E+03	0.37459	2.67	0.080999
9.4	0.97699	0.030217	1.7E+03	0.37453	2.67	0.080679
9.42	0.97721	0.030093	1.7E+03	0.37448	2.67	0.080361
9.44	0.97744	0.02997	1.7E+03	0.37442	2.671	0.080044
9.46	0.97766	0.029848	1.7E+03	0.37437	2.671	0.07973
9.48	0.97788	0.029727	1.7E+03	0.37431	2.672	0.079417
9.5	0.9781	0.029606	1.8E+03	0.37426	2.672	0.079106
9.52	0.97832	0.029486	1.8E+03	0.37421	2.672	0.078796
9.54	0.97854	0.029367	1.8E+03	0.37415	2.673	0.078489
9.56	0.97876	0.029248	1.8E+03	0.3741	2.673	0.078183
9.58	0.97898	0.02913	1.9E+03	0.37404	2.673	0.077879
9.6	0.97919	0.029013	1.9E+03	0.37399	2.674	0.077577
9.62	0.9794	0.028897	1.9E+03	0.37394	2.674	0.077276
9.64	0.97962	0.028781	1.9E+03	0.37389	2.675	0.076977
9.66	0.97983	0.028666	2.0E+03	0.37384	2.675	0.07668
9.68	0.98004	0.028551	2.0E+03	0.37378	2.675	0.076385
9.7	0.98024	0.028438	2.0E+03	0.37373	2.676	0.076091
9.72	0.98045	0.028325	2.0E+03	0.37368	2.676	0.075799
9.74	0.98066	0.028212	2.1E+03	0.37363	2.676	0.075508
9.76	0.98086	0.028101	2.1E+03	0.37358	2.677	0.075219
9.78	0.98107	0.027989	2.1E+03	0.37353	2.677	0.074932
9.8	0.98127	0.027879	2.1E+03	0.37348	2.678	0.074646
9.82	0.98147	0.027769	2.2E+03	0.37343	2.678	0.074362
9.84	0.98167	0.02766	2.2E+03	0.37338	2.678	0.07408
9.86	0.98187	0.027552	2.2E+03	0.37334	2.679	0.073799
9.88	0.98206	0.027444	2.2E+03	0.37329	2.679	0.073519
9.9	0.98226	0.027337	2.3E+03	0.37324	2.679	0.073241
9.92	0.98246	0.02723	2.3E+03	0.37319	2.68	0.072965
9.94	0.98265	0.027124	2.3E+03	0.37314	2.68	0.07269
9.96	0.98284	0.027018	2.4E+03	0.3731	2.68	0.072417
9.98	0.98304	0.026914	2.4E+03	0.37305	2.681	0.072145

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
10	0.98323	0.02681	$2.4E{+}03$	0.373	2.681	0.071875
10.1	0.98417	0.026297	$2.6E{+}03$	0.37277	2.683	0.070546
10.2	0.98508	0.0258	$2.7E{+}03$	0.37255	2.684	0.069252
10.3	0.98596	0.025316	$2.9E{+}03$	0.37233	2.686	0.067993
10.4	0.98683	0.024846	$3.1E{+}03$	0.37212	2.687	0.066767
10.5	0.98767	0.024388	$3.3E{+}03$	0.37192	2.689	0.065574
10.6	0.98848	0.023943	$3.5E{+}03$	0.37172	2.69	0.064411
10.7	0.98928	0.02351	$3.7E{+}03$	0.37152	2.692	0.063279
10.8	0.99005	0.023088	$3.9E{+}03$	0.37134	2.693	0.062176
10.9	0.99081	0.022678	$4.1E{+}03$	0.37115	2.694	0.0611
11	0.99154	0.022278	$4.4E{+}03$	0.37097	2.696	0.060052
11.1	0.99225	0.021888	$4.6E{+}03$	0.3708	2.697	0.05903
11.2	0.99295	0.021509	$4.9E{+}03$	0.37063	2.698	0.058034
11.3	0.99363	0.02114	$5.2E{+}03$	0.37047	2.699	0.057062
11.4	0.99429	0.020779	$5.5E{+}03$	0.37031	2.7	0.056114
11.5	0.99494	0.020428	$5.8E{+}03$	0.37015	2.702	0.055189
11.6	0.99557	0.020086	$6.1E{+}03$	0.37	2.703	0.054286
11.7	0.99618	0.019752	$6.4E{+}03$	0.36985	2.704	0.053405
11.8	0.99678	0.019426	$6.8E{+}03$	0.3697	2.705	0.052545
11.9	0.99736	0.019108	$7.2E{+}03$	0.36956	2.706	0.051705
12	0.99793	0.018798	$7.6E{+}03$	0.36942	2.707	0.050885
12.1	0.99849	0.018495	$8.0E{+}03$	0.36929	2.708	0.050084
12.2	0.99903	0.0182	$8.4E{+}03$	0.36916	2.709	0.049301
12.3	0.99956	0.017911	$8.8E{+}03$	0.36903	2.71	0.048537
12.4	1	0.01763	$9.3E{+}03$	0.3689	2.711	0.047789
12.5	1.001	0.017354	$9.8E{+}03$	0.36878	2.712	0.047059
12.6	1.001	0.017086	$1.0E{+}04$	0.36866	2.713	0.046345
12.7	1.002	0.016823	$1.1E{+}04$	0.36855	2.713	0.045647
12.8	1.002	0.016566	$1.1E{+}04$	0.36843	2.714	0.044964
12.9	1.003	0.016315	$1.2E{+}04$	0.36832	2.715	0.044296
13	1.003	0.01607	$1.3E{+}04$	0.36821	2.716	0.043643
13.1	1.003	0.01583	$1.3E{+}04$	0.36811	2.717	0.043004

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
13.2	1.004	0.015596	$1.4E{+}04$	0.368	2.717	0.042379
13.3	1.004	0.015366	$1.5E{+}04$	0.3679	2.718	0.041767
13.4	1.005	0.015142	$1.5E{+}04$	0.3678	2.719	0.041168
13.5	1.005	0.014922	$1.6E{+}04$	0.3677	2.72	0.040582
13.6	1.005	0.014707	$1.7E{+}04$	0.36761	2.72	0.040008
13.7	1.006	0.014497	$1.8E{+}04$	0.36752	2.721	0.039446
13.8	1.006	0.014291	$1.8E{+}04$	0.36742	2.722	0.038896
13.9	1.007	0.01409	$1.9E{+}04$	0.36734	2.722	0.038357
14	1.007	0.013893	$2.0E{+}04$	0.36725	2.723	0.037829
14.1	1.007	0.013699	$2.1E{+}04$	0.36716	2.724	0.037312
14.2	1.008	0.01351	$2.2E{+}04$	0.36708	2.724	0.036805
14.3	1.008	0.013325	$2.3E{+}04$	0.367	2.725	0.036308
14.4	1.008	0.013143	$2.4E{+}04$	0.36692	2.725	0.035821
14.5	1.009	0.012965	$2.5E{+}04$	0.36684	2.726	0.035344
14.6	1.009	0.012791	$2.6E{+}04$	0.36676	2.727	0.034876
14.7	1.009	0.01262	$2.8E{+}04$	0.36669	2.727	0.034417
14.8	1.01	0.012453	$2.9E{+}04$	0.36661	2.728	0.033967
14.9	1.01	0.012289	$3.0E{+}04$	0.36654	2.728	0.033526
15	1.01	0.012128	$3.1E{+}04$	0.36647	2.729	0.033094
15.1	1.011	0.01197	$3.3E{+}04$	0.3664	2.729	0.032669
15.2	1.011	0.011815	$3.4E{+}04$	0.36633	2.73	0.032253
15.3	1.011	0.011663	$3.6E{+}04$	0.36626	2.73	0.031844
15.4	1.011	0.011514	$3.7E{+}04$	0.3662	2.731	0.031443
15.5	1.012	0.011368	$3.9E{+}04$	0.36613	2.731	0.03105
15.6	1.012	0.011225	$4.1E{+}04$	0.36607	2.732	0.030663
15.7	1.012	0.011084	$4.2E{+}04$	0.36601	2.732	0.030284
15.8	1.012	0.010946	$4.4E{+}04$	0.36595	2.733	0.029912
15.9	1.013	0.010811	$4.6E{+}04$	0.36589	2.733	0.029547
16	1.013	0.010678	$4.8E{+}04$	0.36583	2.734	0.029188
16.1	1.013	0.010547	$5.0E{+}04$	0.36577	2.734	0.028835
16.2	1.013	0.010419	$5.2E{+}04$	0.36572	2.734	0.028489
16.3	1.014	0.010293	$5.4E{+}04$	0.36566	2.735	0.028149

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
16.4	1.014	0.010169	5.6E+04	0.36561	2.735	0.027815
16.5	1.014	0.010048	5.8E+04	0.36555	2.736	0.027487
16.6	1.014	0.00993	6.1E+04	0.3655	2.736	0.027165
16.7	1.014	0.00981	6.3E+04	0.36545	2.736	0.026848
16.8	1.015	0.0097	6.6E+04	0.3654	2.737	0.026537
16.9	1.015	0.00958	6.8E+04	0.36535	2.737	0.026231
17	1.015	0.00947	7.1E+04	0.3653	2.737	0.02593
17.1	1.015	0.00936	7.4E+04	0.36525	2.738	0.025634
17.2	1.016	0.00926	7.6E+04	0.3652	2.738	0.025344
17.3	1.016	0.00915	7.9E+04	0.36516	2.739	0.025058
17.4	1.016	0.00905	8.2E+04	0.36511	2.739	0.024777
17.5	1.016	0.00894	8.5E+04	0.36507	2.739	0.024501
17.6	1.016	0.00884	8.9E+04	0.36502	2.74	0.024229
17.7	1.016	0.00875	9.2E+04	0.36498	2.74	0.023962
17.8	1.017	0.00865	9.5E+04	0.36494	2.74	0.023699
17.9	1.017	0.00855	9.9E+04	0.3649	2.741	0.02344
18	1.017	0.00846	1.0E+05	0.36485	2.741	0.023185
18.1	1.017	0.00837	1.1E+05	0.36481	2.741	0.022935
18.2	1.017	0.00828	1.1E+05	0.36477	2.741	0.022689
18.3	1.017	0.00819	1.1E+05	0.36473	2.742	0.022446
18.4	1.018	0.0081	1.2E+05	0.3647	2.742	0.022208
18.5	1.018	0.00801	1.2E+05	0.36466	2.742	0.021973
18.6	1.018	0.00793	1.3E+05	0.36462	2.743	0.021742
18.7	1.018	0.00784	1.3E+05	0.36458	2.743	0.021514
18.8	1.018	0.00776	1.4E+05	0.36455	2.743	0.02129
18.9	1.018	0.00768	1.4E+05	0.36451	2.743	0.021069
19	1.019	0.0076	1.5E+05	0.36448	2.744	0.020852
19.1	1.019	0.00752	1.5E+05	0.36444	2.744	0.020638
19.2	1.019	0.00744	1.6E+05	0.36441	2.744	0.020428
19.3	1.019	0.00737	1.6E+05	0.36438	2.744	0.02022
19.4	1.019	0.00729	1.7E+05	0.36434	2.745	0.020016
19.5	1.019	0.00722	1.7E+05	0.36431	2.745	0.019815

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
19.6	1.019	0.00715	$1.8E{+}05$	0.36428	2.745	0.019617
19.7	1.02	0.00707	$1.8E{+}05$	0.36425	2.745	0.019421
19.8	1.02	0.007	$1.9E{+}05$	0.36422	2.746	0.019229
19.9	1.02	0.00693	$2.0E{+}05$	0.36418	2.746	0.019039
20	1.02	0.00687	$2.0E{+}05$	0.36415	2.746	0.018852
20.1	1.02	0.0068	$2.1E{+}05$	0.36413	2.746	0.018668
20.2	1.02	0.00673	$2.2E{+}05$	0.3641	2.747	0.018487
20.3	1.02	0.00667	$2.3E{+}05$	0.36407	2.747	0.018308
20.4	1.02	0.0066	$2.3E{+}05$	0.36404	2.747	0.018132
20.5	1.021	0.00654	$2.4E{+}05$	0.36401	2.747	0.017958
20.6	1.021	0.00647	$2.5E{+}05$	0.36398	2.747	0.017787
20.7	1.021	0.00641	$2.6E{+}05$	0.36396	2.748	0.017618
20.8	1.021	0.00635	$2.6E{+}05$	0.36393	2.748	0.017452
20.9	1.021	0.00629	$2.7E{+}05$	0.3639	2.748	0.017288
21	1.021	0.00623	$2.8E{+}05$	0.36388	2.748	0.017126
21.1	1.021	0.00617	$2.9E{+}05$	0.36385	2.748	0.016966
21.2	1.021	0.00612	$3.0E{+}05$	0.36383	2.749	0.016809
21.3	1.021	0.00606	$3.1E{+}05$	0.3638	2.749	0.016654
21.4	1.022	0.006	$3.2E{+}05$	0.36378	2.749	0.016501
21.5	1.022	0.00595	$3.3E{+}05$	0.36375	2.749	0.01635
21.6	1.022	0.00589	$3.4E{+}05$	0.36373	2.749	0.016201
21.7	1.022	0.00584	$3.5E{+}05$	0.36371	2.749	0.016054
21.8	1.022	0.00579	$3.6E{+}05$	0.36368	2.75	0.015909
21.9	1.022	0.00573	$3.7E{+}05$	0.36366	2.75	0.015766
22	1.022	0.00568	$3.8E{+}05$	0.36364	2.75	0.015625
22.1	1.022	0.00563	$3.9E{+}05$	0.36361	2.75	0.015486
22.2	1.022	0.00558	$4.0E{+}05$	0.36359	2.75	0.015348
22.3	1.022	0.00553	$4.2E{+}05$	0.36357	2.75	0.015213
22.4	1.022	0.00548	$4.3E{+}05$	0.36355	2.751	0.015079
22.5	1.023	0.00543	$4.4E{+}05$	0.36353	2.751	0.014947
22.6	1.023	0.00539	$4.5E{+}05$	0.36351	2.751	0.014817
22.7	1.023	0.00534	$4.7E{+}05$	0.36349	2.751	0.014688

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
22.8	1.023	0.00529	$4.8E{+}05$	0.36347	2.751	0.014561
22.9	1.023	0.00525	$5.0E{+}05$	0.36345	2.751	0.014436
23	1.023	0.0052	$5.1E{+}05$	0.36343	2.752	0.014312
23.1	1.023	0.00516	$5.3E{+}05$	0.36341	2.752	0.01419
23.2	1.023	0.00511	$5.4E{+}05$	0.36339	2.752	0.01407
23.3	1.023	0.00507	$5.6E{+}05$	0.36337	2.752	0.013951
23.4	1.023	0.00503	$5.7E{+}05$	0.36335	2.752	0.013833
23.5	1.023	0.00498	$5.9E{+}05$	0.36333	2.752	0.013717
23.6	1.023	0.00494	$6.0E{+}05$	0.36331	2.752	0.013602
23.7	1.024	0.0049	$6.2E{+}05$	0.36329	2.753	0.013489
23.8	1.024	0.00486	$6.4E{+}05$	0.36328	2.753	0.013377
23.9	1.024	0.00482	$6.6E{+}05$	0.36326	2.753	0.013267
24	1.024	0.00478	$6.8E{+}05$	0.36324	2.753	0.013158
24.1	1.024	0.00474	$6.9E{+}05$	0.36322	2.753	0.01305
24.2	1.024	0.0047	$7.1E{+}05$	0.36321	2.753	0.012944
24.3	1.024	0.00466	$7.3E{+}05$	0.36319	2.753	0.012839
24.4	1.024	0.00462	$7.5E{+}05$	0.36317	2.754	0.012735
24.5	1.024	0.00459	$7.7E{+}05$	0.36316	2.754	0.012632
24.6	1.024	0.00455	$7.9E{+}05$	0.36314	2.754	0.012531
24.7	1.024	0.00451	$8.2E{+}05$	0.36313	2.754	0.012431
24.8	1.024	0.00448	$8.4E{+}05$	0.36311	2.754	0.012332
24.9	1.024	0.00444	$8.6E{+}05$	0.36309	2.754	0.012234
25	1.024	0.00441	$8.8E{+}05$	0.36308	2.754	0.012137
25.1	1.025	0.00437	$9.1E{+}05$	0.36306	2.754	0.012042
25.2	1.025	0.00434	$9.3E{+}05$	0.36305	2.754	0.011947
25.3	1.025	0.0043	$9.6E{+}05$	0.36303	2.755	0.011854
25.4	1.025	0.00427	$9.8E{+}05$	0.36302	2.755	0.011762
25.5	1.025	0.00424	$1.0E{+}06$	0.363	2.755	0.011671
25.6	1.025	0.0042	$1.0E{+}06$	0.36299	2.755	0.011581
25.7	1.025	0.00417	$1.1E{+}06$	0.36298	2.755	0.011492
25.8	1.025	0.00414	$1.1E{+}06$	0.36296	2.755	0.011404
25.9	1.025	0.00411	$1.1E{+}06$	0.36295	2.755	0.011317

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
26	1.025	0.00408	1.1E+06	0.36293	2.755	0.01123
26.1	1.025	0.00404	1.2E+06	0.36292	2.755	0.011145
26.2	1.025	0.00401	1.2E+06	0.36291	2.756	0.011061
26.3	1.025	0.00398	1.2E+06	0.36289	2.756	0.010978
26.4	1.025	0.00395	1.3E+06	0.36288	2.756	0.010896
26.5	1.025	0.00392	1.3E+06	0.36287	2.756	0.010815
26.6	1.025	0.00389	1.3E+06	0.36285	2.756	0.010734
26.7	1.025	0.00387	1.4E+06	0.36284	2.756	0.010655
26.8	1.026	0.00384	1.4E+06	0.36283	2.756	0.010576
26.9	1.026	0.00381	1.4E+06	0.36282	2.756	0.010498
27	1.026	0.00378	1.5E+06	0.36281	2.756	0.010421
27.1	1.026	0.00375	1.5E+06	0.36279	2.756	0.010345
27.2	1.026	0.00373	1.5E+06	0.36278	2.756	0.01027
27.3	1.026	0.0037	1.6E+06	0.36277	2.757	0.010196
27.4	1.026	0.00367	1.6E+06	0.36276	2.757	0.010122
27.5	1.026	0.00365	1.7E+06	0.36275	2.757	0.010049
27.6	1.026	0.00362	1.7E+06	0.36273	2.757	0.00998
27.7	1.026	0.00359	1.7E+06	0.36272	2.757	0.00991
27.8	1.026	0.00357	1.8E+06	0.36271	2.757	0.00984
27.9	1.026	0.00354	1.8E+06	0.3627	2.757	0.00977
28	1.026	0.00352	1.9E+06	0.36269	2.757	0.0097
28.1	1.026	0.00349	1.9E+06	0.36268	2.757	0.00963
28.2	1.026	0.00347	2.0E+06	0.36267	2.757	0.00956
28.3	1.026	0.00344	2.0E+06	0.36266	2.757	0.00949
28.4	1.026	0.00342	2.0E+06	0.36265	2.758	0.00943
28.5	1.026	0.00339	2.1E+06	0.36264	2.758	0.00936
28.6	1.026	0.00337	2.1E+06	0.36263	2.758	0.0093
28.7	1.026	0.00335	2.2E+06	0.36262	2.758	0.00923
28.8	1.026	0.00332	2.2E+06	0.36261	2.758	0.00917
28.9	1.027	0.0033	2.3E+06	0.3626	2.758	0.00911
29	1.027	0.00328	2.4E+06	0.36259	2.758	0.00904
29.1	1.027	0.00326	2.4E+06	0.36258	2.758	0.00898

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
29.2	1.027	0.00323	2.5E+06	0.36257	2.758	0.00892
29.3	1.027	0.00321	2.5E+06	0.36256	2.758	0.00886
29.4	1.027	0.00319	2.6E+06	0.36255	2.758	0.0088
29.5	1.027	0.00317	2.6E+06	0.36254	2.758	0.00874
29.6	1.027	0.00315	2.7E+06	0.36253	2.758	0.00868
29.7	1.027	0.00313	2.8E+06	0.36252	2.758	0.00863
29.8	1.027	0.00311	2.8E+06	0.36251	2.759	0.00857
29.9	1.027	0.00309	2.9E+06	0.3625	2.759	0.00851
30	1.027	0.00307	2.9E+06	0.36249	2.759	0.00846
30.1	1.027	0.00304	3.0E+06	0.36248	2.759	0.0084
30.2	1.027	0.00302	3.1E+06	0.36248	2.759	0.00835
30.3	1.027	0.00301	3.1E+06	0.36247	2.759	0.00829
30.4	1.027	0.00299	3.2E+06	0.36246	2.759	0.00824
30.5	1.027	0.00297	3.3E+06	0.36245	2.759	0.00818
30.6	1.027	0.00295	3.4E+06	0.36244	2.759	0.00813
30.7	1.027	0.00293	3.4E+06	0.36243	2.759	0.00808
30.8	1.027	0.00291	3.5E+06	0.36242	2.759	0.00803
30.9	1.027	0.00289	3.6E+06	0.36242	2.759	0.00797
31	1.027	0.00287	3.7E+06	0.36241	2.759	0.00792
31.1	1.027	0.00285	3.7E+06	0.3624	2.759	0.00787
31.2	1.027	0.00283	3.8E+06	0.36239	2.759	0.00782
31.3	1.027	0.00282	3.9E+06	0.36238	2.76	0.00777
31.4	1.027	0.0028	4.0E+06	0.36238	2.76	0.00772
31.5	1.027	0.00278	4.1E+06	0.36237	2.76	0.00767
31.6	1.028	0.00276	4.1E+06	0.36236	2.76	0.00763
31.7	1.028	0.00275	4.2E+06	0.36235	2.76	0.00758
31.8	1.028	0.00273	4.3E+06	0.36235	2.76	0.00753
31.9	1.028	0.00271	4.4E+06	0.36234	2.76	0.00748
32	1.028	0.0027	4.5E+06	0.36233	2.76	0.00744
32.1	1.028	0.00268	4.6E+06	0.36232	2.76	0.00739
32.2	1.028	0.00266	4.7E+06	0.36232	2.76	0.00735
32.3	1.028	0.00265	4.8E+06	0.36231	2.76	0.0073

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
32.4	1.028	0.00263	4.9E+06	0.3623	2.76	0.00726
32.5	1.028	0.00261	5.0E+06	0.3623	2.76	0.00721
32.6	1.028	0.0026	5.1E+06	0.36229	2.76	0.00717
32.7	1.028	0.00258	5.2E+06	0.36228	2.76	0.00713
32.8	1.028	0.00257	5.3E+06	0.36227	2.76	0.00708
32.9	1.028	0.00255	5.4E+06	0.36227	2.76	0.00704
33	1.028	0.00253	5.5E+06	0.36226	2.76	0.007
33.1	1.028	0.00252	5.6E+06	0.36225	2.76	0.00696
33.2	1.028	0.0025	5.8E+06	0.36225	2.761	0.00691
33.3	1.028	0.00249	5.9E+06	0.36224	2.761	0.00687
33.4	1.028	0.00247	6.0E+06	0.36224	2.761	0.00683
33.5	1.028	0.00246	6.1E+06	0.36223	2.761	0.00679
33.6	1.028	0.00245	6.2E+06	0.36222	2.761	0.00675
33.7	1.028	0.00243	6.4E+06	0.36222	2.761	0.00671
33.8	1.028	0.00242	6.5E+06	0.36221	2.761	0.00667
33.9	1.028	0.0024	6.6E+06	0.3622	2.761	0.00663
34	1.028	0.00239	6.7E+06	0.3622	2.761	0.00659
34.1	1.028	0.00237	6.9E+06	0.36219	2.761	0.00656
34.2	1.028	0.00236	7.0E+06	0.36219	2.761	0.00652
34.3	1.028	0.00235	7.1E+06	0.36218	2.761	0.00648
34.4	1.028	0.00233	7.3E+06	0.36217	2.761	0.00644
34.5	1.028	0.00232	7.4E+06	0.36217	2.761	0.00641
34.6	1.028	0.00231	7.6E+06	0.36216	2.761	0.00637
34.7	1.028	0.00229	7.7E+06	0.36216	2.761	0.00633
34.8	1.028	0.00228	7.9E+06	0.36215	2.761	0.0063
34.9	1.028	0.00227	8.0E+06	0.36214	2.761	0.00626
35	1.028	0.00225	8.2E+06	0.36214	2.761	0.00622
35.1	1.028	0.00224	8.3E+06	0.36213	2.761	0.00619
35.2	1.029	0.00223	8.5E+06	0.36213	2.761	0.00615
35.3	1.029	0.00222	8.6E+06	0.36212	2.761	0.00612
35.4	1.029	0.0022	8.8E+06	0.36212	2.762	0.00609
35.5	1.029	0.00219	9.0E+06	0.36211	2.762	0.00605

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
35.6	1.029	0.00218	9.1E+06	0.36211	2.762	0.00602
35.7	1.029	0.00217	9.3E+06	0.3621	2.762	0.00598
35.8	1.029	0.00215	9.5E+06	0.3621	2.762	0.00595
35.9	1.029	0.00214	9.7E+06	0.36209	2.762	0.00592
36	1.029	0.00213	9.8E+06	0.36209	2.762	0.00589
36.1	1.029	0.00212	1.0E+07	0.36208	2.762	0.00585
36.2	1.029	0.00211	1.0E+07	0.36208	2.762	0.00582
36.3	1.029	0.0021	1.0E+07	0.36207	2.762	0.00579
36.4	1.029	0.00208	1.1E+07	0.36207	2.762	0.00576
36.5	1.029	0.00207	1.1E+07	0.36206	2.762	0.00573
36.6	1.029	0.00206	1.1E+07	0.36206	2.762	0.00569
36.7	1.029	0.00205	1.1E+07	0.36205	2.762	0.00566
36.8	1.029	0.00204	1.1E+07	0.36205	2.762	0.00563
36.9	1.029	0.00203	1.2E+07	0.36204	2.762	0.0056
37	1.029	0.00202	1.2E+07	0.36204	2.762	0.00557
37.1	1.029	0.00201	1.2E+07	0.36203	2.762	0.00554
37.2	1.029	0.002	1.2E+07	0.36203	2.762	0.00551
37.3	1.029	0.00199	1.2E+07	0.36202	2.762	0.00548
37.4	1.029	0.00197	1.3E+07	0.36202	2.762	0.00546
37.5	1.029	0.00196	1.3E+07	0.36201	2.762	0.00543
37.6	1.029	0.00195	1.3E+07	0.36201	2.762	0.0054
37.7	1.029	0.00194	1.3E+07	0.362	2.762	0.00537
37.8	1.029	0.00193	1.4E+07	0.362	2.762	0.00534
37.9	1.029	0.00192	1.4E+07	0.36199	2.762	0.00531
38	1.029	0.00191	1.4E+07	0.36199	2.763	0.00528
38.1	1.029	0.0019	1.4E+07	0.36199	2.763	0.00526
38.2	1.029	0.00189	1.5E+07	0.36198	2.763	0.00523
38.3	1.029	0.00188	1.5E+07	0.36198	2.763	0.0052
38.4	1.029	0.00187	1.5E+07	0.36197	2.763	0.00518
38.5	1.029	0.00186	1.5E+07	0.36197	2.763	0.00515
38.6	1.029	0.00185	1.6E+07	0.36196	2.763	0.00512
38.7	1.029	0.00184	1.6E+07	0.36196	2.763	0.0051

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
38.8	1.029	0.00184	1.6E+07	0.36196	2.763	0.00507
38.9	1.029	0.00183	1.6E+07	0.36195	2.763	0.00504
39	1.029	0.00182	1.7E+07	0.36195	2.763	0.00502
39.1	1.029	0.00181	1.7E+07	0.36194	2.763	0.00499
39.2	1.029	0.0018	1.7E+07	0.36194	2.763	0.00497
39.3	1.029	0.00179	1.8E+07	0.36194	2.763	0.00494
39.4	1.029	0.00178	1.8E+07	0.36193	2.763	0.00492
39.5	1.029	0.00177	1.8E+07	0.36193	2.763	0.00489
39.6	1.029	0.00176	1.9E+07	0.36192	2.763	0.00487
39.7	1.029	0.00175	1.9E+07	0.36192	2.763	0.00484
39.8	1.029	0.00174	1.9E+07	0.36192	2.763	0.00482
39.9	1.029	0.00174	1.9E+07	0.36191	2.763	0.0048
40	1.029	0.00173	2.0E+07	0.36191	2.763	0.00477
40.1	1.029	0.00172	2.0E+07	0.36191	2.763	0.00475
40.2	1.029	0.00171	2.0E+07	0.3619	2.763	0.00472
40.3	1.029	0.0017	2.1E+07	0.3619	2.763	0.0047
40.4	1.029	0.00169	2.1E+07	0.36189	2.763	0.00468
40.5	1.03	0.00168	2.1E+07	0.36189	2.763	0.00466
40.6	1.03	0.00168	2.2E+07	0.36189	2.763	0.00463
40.7	1.03	0.00167	2.2E+07	0.36188	2.763	0.00461
40.8	1.03	0.00166	2.3E+07	0.36188	2.763	0.00459
40.9	1.03	0.00165	2.3E+07	0.36188	2.763	0.00456
41	1.03	0.00164	2.3E+07	0.36187	2.763	0.00454
41.1	1.03	0.00164	2.4E+07	0.36187	2.763	0.00452
41.2	1.03	0.00163	2.4E+07	0.36187	2.763	0.0045
41.3	1.03	0.00162	2.4E+07	0.36186	2.763	0.00448
41.4	1.03	0.00161	2.5E+07	0.36186	2.764	0.00446
41.5	1.03	0.0016	2.5E+07	0.36186	2.764	0.00443
41.6	1.03	0.0016	2.6E+07	0.36185	2.764	0.00441
41.7	1.03	0.00159	2.6E+07	0.36185	2.764	0.00439
41.8	1.03	0.00158	2.6E+07	0.36185	2.764	0.00437
41.9	1.03	0.00157	2.7E+07	0.36184	2.764	0.00435

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
42	1.03	0.00157	$2.7E{+}07$	0.36184	2.764	0.00433
42.1	1.03	0.00156	$2.8E{+}07$	0.36184	2.764	0.00431
42.2	1.03	0.00155	$2.8E{+}07$	0.36183	2.764	0.00429
42.3	1.03	0.00154	$2.9E{+}07$	0.36183	2.764	0.00427
42.4	1.03	0.00154	$2.9E{+}07$	0.36183	2.764	0.00425
42.5	1.03	0.00153	$3.0E{+}07$	0.36182	2.764	0.00423
42.6	1.03	0.00152	$3.0E{+}07$	0.36182	2.764	0.00421
42.7	1.03	0.00152	$3.1E{+}07$	0.36182	2.764	0.00419
42.8	1.03	0.00151	$3.1E{+}07$	0.36181	2.764	0.00417
42.9	1.03	0.0015	$3.1E{+}07$	0.36181	2.764	0.00415
43	1.03	0.00149	$3.2E{+}07$	0.36181	2.764	0.00413
43.1	1.03	0.00149	$3.2E{+}07$	0.36181	2.764	0.00411
43.2	1.03	0.00148	$3.3E{+}07$	0.3618	2.764	0.00409
43.3	1.03	0.00147	$3.3E{+}07$	0.3618	2.764	0.00407
43.4	1.03	0.00147	$3.4E{+}07$	0.3618	2.764	0.00406
43.5	1.03	0.00146	$3.5E{+}07$	0.36179	2.764	0.00404
43.6	1.03	0.00145	$3.5E{+}07$	0.36179	2.764	0.00402
43.7	1.03	0.00145	$3.6E{+}07$	0.36179	2.764	0.004
43.8	1.03	0.00144	$3.6E{+}07$	0.36178	2.764	0.00398
43.9	1.03	0.00143	$3.7E{+}07$	0.36178	2.764	0.00396
44	1.03	0.00143	$3.7E{+}07$	0.36178	2.764	0.00395
44.1	1.03	0.00142	$3.8E{+}07$	0.36178	2.764	0.00393
44.2	1.03	0.00141	$3.8E{+}07$	0.36177	2.764	0.00391
44.3	1.03	0.00141	$3.9E{+}07$	0.36177	2.764	0.00389
44.4	1.03	0.0014	$4.0E{+}07$	0.36177	2.764	0.00388
44.5	1.03	0.0014	$4.0E{+}07$	0.36176	2.764	0.00386
44.6	1.03	0.00139	$4.1E{+}07$	0.36176	2.764	0.00384
44.7	1.03	0.00138	$4.1E{+}07$	0.36176	2.764	0.00382
44.8	1.03	0.00138	$4.2E{+}07$	0.36176	2.764	0.00381
44.9	1.03	0.00137	$4.3E{+}07$	0.36175	2.764	0.00379
45	1.03	0.00137	$4.3E{+}07$	0.36175	2.764	0.00377
45.1	1.03	0.00136	$4.4E{+}07$	0.36175	2.764	0.00376

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
45.2	1.03	0.00135	4.5E+07	0.36175	2.764	0.00374
45.3	1.03	0.00135	4.5E+07	0.36174	2.764	0.00372
45.4	1.03	0.00134	4.6E+07	0.36174	2.764	0.00371
45.5	1.03	0.00134	4.7E+07	0.36174	2.764	0.00369
45.6	1.03	0.00133	4.7E+07	0.36174	2.764	0.00368
45.7	1.03	0.00132	4.8E+07	0.36173	2.764	0.00366
45.8	1.03	0.00132	4.9E+07	0.36173	2.764	0.00364
45.9	1.03	0.00131	4.9E+07	0.36173	2.765	0.00363
46	1.03	0.00131	5.0E+07	0.36173	2.765	0.00361
46.1	1.03	0.0013	5.1E+07	0.36172	2.765	0.0036
46.2	1.03	0.0013	5.2E+07	0.36172	2.765	0.00358
46.3	1.03	0.00129	5.2E+07	0.36172	2.765	0.00357
46.4	1.03	0.00128	5.3E+07	0.36172	2.765	0.00355
46.5	1.03	0.00128	5.4E+07	0.36171	2.765	0.00353
46.6	1.03	0.00127	5.5E+07	0.36171	2.765	0.00352
46.7	1.03	0.00127	5.5E+07	0.36171	2.765	0.0035
46.8	1.03	0.00126	5.6E+07	0.36171	2.765	0.00349
46.9	1.03	0.00126	5.7E+07	0.3617	2.765	0.00347
47	1.03	0.00125	5.8E+07	0.3617	2.765	0.00346
47.1	1.03	0.00125	5.9E+07	0.3617	2.765	0.00345
47.2	1.03	0.00124	5.9E+07	0.3617	2.765	0.00343
47.3	1.03	0.00124	6.0E+07	0.3617	2.765	0.00342
47.4	1.03	0.00123	6.1E+07	0.36169	2.765	0.0034
47.5	1.03	0.00123	6.2E+07	0.36169	2.765	0.00339
47.6	1.03	0.00122	6.3E+07	0.36169	2.765	0.00337
47.7	1.03	0.00122	6.4E+07	0.36169	2.765	0.00336
47.8	1.03	0.00121	6.5E+07	0.36168	2.765	0.00335
47.9	1.03	0.00121	6.5E+07	0.36168	2.765	0.00333
48	1.03	0.0012	6.6E+07	0.36168	2.765	0.00332
48.1	1.03	0.0012	6.7E+07	0.36168	2.765	0.0033
48.2	1.03	0.00119	6.8E+07	0.36168	2.765	0.00329
48.3	1.03	0.00119	6.9E+07	0.36167	2.765	0.00328

Table 5.2: Fanno Flow Standard Basic Table k=1.3 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
48.4	1.03	0.00118	$7.0E{+}07$	0.36167	2.765	0.00326
48.5	1.03	0.00118	$7.1E{+}07$	0.36167	2.765	0.00325
48.6	1.03	0.00117	$7.2E{+}07$	0.36167	2.765	0.00324
48.7	1.03	0.00117	$7.3E{+}07$	0.36166	2.765	0.00322
48.8	1.03	0.00116	$7.4E{+}07$	0.36166	2.765	0.00321
48.9	1.03	0.00116	$7.5E{+}07$	0.36166	2.765	0.0032
49	1.03	0.00115	$7.6E{+}07$	0.36166	2.765	0.00318
49.1	1.031	0.00115	$7.7E{+}07$	0.36166	2.765	0.00317
49.2	1.031	0.00114	$7.8E{+}07$	0.36165	2.765	0.00316
49.3	1.031	0.00114	$7.9E{+}07$	0.36165	2.765	0.00315
49.4	1.031	0.00113	$8.0E{+}07$	0.36165	2.765	0.00313
49.5	1.031	0.00113	$8.1E{+}07$	0.36165	2.765	0.00312
49.6	1.031	0.00112	$8.3E{+}07$	0.36165	2.765	0.00311
49.7	1.031	0.00112	$8.4E{+}07$	0.36164	2.765	0.0031
49.8	1.031	0.00111	$8.5E{+}07$	0.36164	2.765	0.00308
49.9	1.031	0.00111	$8.6E{+}07$	0.36164	2.765	0.00307
50	1.031	0.00111	$8.7E{+}07$	0.36164	2.765	0.00306

5.3 Standard Fanno Flow Table for k=1.4

Table 5.3: Fanno Flow Standard Basic Table k=1.4

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.01	7134.40	109.54	57.8738	91.2880	0.01095	1.2000
0.02	1778.45	54.7701	28.9421	45.6454	0.02191	1.1999
0.03	787.08	36.5116	19.3005	30.4318	0.03286	1.1998
0.04	440.35	27.3817	14.4815	22.8254	0.04381	1.1996
0.05	280.02	21.9034	11.5914	18.2620	0.05476	1.1994
0.06	193.03	18.2508	9.6659	15.2200	0.06570	1.1991
0.07	140.66	15.6416	8.2915	13.0474	0.07664	1.1988
0.08	106.72	13.6843	7.2616	11.4182	0.08758	1.1985

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.09	83.4961	12.1618	6.4613	10.1512	0.09851	1.1981
0.10	66.9216	10.9435	5.8218	9.1378	0.10944	1.1976
0.11	54.6879	9.9466	5.2992	8.3089	0.12035	1.1971
0.12	45.4080	9.1156	4.8643	7.6182	0.13126	1.1966
0.13	38.2070	8.4123	4.4969	7.0339	0.14217	1.1960
0.14	32.5113	7.8093	4.1824	6.5333	0.15306	1.1953
0.15	27.9320	7.2866	3.9103	6.0995	0.16395	1.1946
0.16	24.1978	6.8291	3.6727	5.7200	0.17482	1.1939
0.17	21.1152	6.4253	3.4635	5.3853	0.18569	1.1931
0.18	18.5427	6.0662	3.2779	5.0879	0.19654	1.1923
0.19	16.3752	5.7448	3.1123	4.8219	0.20739	1.1914
0.20	14.5333	5.4554	2.9635	4.5826	0.21822	1.1905
0.21	12.9560	5.1936	2.8293	4.3661	0.22904	1.1895
0.22	11.5961	4.9554	2.7076	4.1694	0.23984	1.1885
0.23	10.4161	4.7378	2.5968	3.9899	0.25063	1.1874
0.24	9.3865	4.5383	2.4956	3.8255	0.26141	1.1863
0.25	8.4834	4.3546	2.4027	3.6742	0.27217	1.1852
0.26	7.6876	4.1851	2.3173	3.5347	0.28291	1.1840
0.27	6.9832	4.0279	2.2385	3.4056	0.29364	1.1828
0.28	6.3572	3.8820	2.1656	3.2857	0.30435	1.1815
0.29	5.7989	3.7460	2.0979	3.1742	0.31504	1.1801
0.30	5.2993	3.6191	2.0351	3.0702	0.32572	1.1788
0.31	4.8507	3.5002	1.9765	2.9729	0.33637	1.1774
0.32	4.4467	3.3887	1.9219	2.8818	0.34701	1.1759
0.33	4.0821	3.2840	1.8707	2.7962	0.35762	1.1744
0.34	3.7520	3.1853	1.8229	2.7158	0.36822	1.1729
0.35	3.4525	3.0922	1.7780	2.6400	0.37879	1.1713
0.36	3.1801	3.0042	1.7358	2.5684	0.38935	1.1697
0.37	2.9320	2.9209	1.6961	2.5008	0.39988	1.1680
0.38	2.7054	2.8420	1.6587	2.4367	0.41039	1.1663
0.39	2.4983	2.7671	1.6234	2.3760	0.42087	1.1646
0.40	2.3085	2.6958	1.5901	2.3184	0.43133	1.1628

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.41	2.1344	2.6280	1.5587	2.2636	0.44177	1.1610
0.42	1.9744	2.5634	1.5289	2.2115	0.45218	1.1591
0.43	1.8272	2.5017	1.5007	2.1619	0.46257	1.1572
0.44	1.6915	2.4428	1.4740	2.1145	0.47293	1.1553
0.45	1.5664	2.3865	1.4487	2.0693	0.48326	1.1533
0.46	1.4509	2.3326	1.4246	2.0261	0.49357	1.1513
0.47	1.3441	2.2809	1.4018	1.9847	0.50385	1.1492
0.48	1.2453	2.2313	1.3801	1.9451	0.51410	1.1471
0.49	1.1539	2.1838	1.3595	1.9072	0.52433	1.1450
0.50	1.0691	2.1381	1.3398	1.8708	0.53452	1.1429
0.51	0.99041	2.0942	1.3212	1.8359	0.54469	1.1407
0.52	0.91742	2.0519	1.3034	1.8024	0.55483	1.1384
0.53	0.84962	2.0112	1.2865	1.7701	0.56493	1.1362
0.54	0.78663	1.9719	1.2703	1.7391	0.57501	1.1339
0.55	0.72805	1.9341	1.2549	1.7092	0.58506	1.1315
0.56	0.67357	1.8975	1.2403	1.6805	0.59507	1.1292
0.57	0.62287	1.8623	1.2263	1.6527	0.60505	1.1268
0.58	0.57568	1.8282	1.2130	1.6260	0.61501	1.1244
0.59	0.53174	1.7952	1.2003	1.6002	0.62492	1.1219
0.60	0.49082	1.7634	1.1882	1.5753	0.63481	1.1194
0.61	0.45271	1.7325	1.1767	1.5512	0.64466	1.1169
0.62	0.41720	1.7026	1.1656	1.5279	0.65448	1.1143
0.63	0.38412	1.6736	1.1552	1.5054	0.66427	1.1117
0.64	0.35330	1.6456	1.1451	1.4836	0.67402	1.1091
0.65	0.32459	1.6183	1.1356	1.4626	0.68374	1.1065
0.66	0.29785	1.5919	1.1265	1.4421	0.69342	1.1038
0.67	0.27295	1.5662	1.1179	1.4223	0.70307	1.1011
0.68	0.24978	1.5413	1.1097	1.4032	0.71268	1.0984
0.69	0.22820	1.5170	1.1018	1.3846	0.72225	1.0957
0.70	0.20814	1.4935	1.0944	1.3665	0.73179	1.0929
0.71	0.18948	1.4705	1.0873	1.3490	0.74129	1.0901
0.72	0.17215	1.4482	1.0806	1.3320	0.75076	1.0873

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.73	0.15605	1.4265	1.0742	1.3155	0.76019	1.0844
0.74	0.14112	1.4054	1.0681	1.2994	0.76958	1.0815
0.75	0.12728	1.3848	1.0624	1.2838	0.77894	1.0787
0.76	0.11447	1.3647	1.0570	1.2686	0.78825	1.0757
0.77	0.10262	1.3451	1.0519	1.2539	0.79753	1.0728
0.78	0.09167	1.3261	1.0471	1.2395	0.80677	1.0698
0.79	0.08158	1.3074	1.0425	1.2255	0.81597	1.0668
0.80	0.07229	1.2893	1.0382	1.2119	0.82514	1.0638
0.81	0.06376	1.2715	1.0342	1.1987	0.83426	1.0608
0.82	0.05593	1.2542	1.0305	1.1858	0.84335	1.0578
0.83	0.04878	1.2373	1.0270	1.1732	0.85239	1.0547
0.84	0.04226	1.2208	1.0237	1.1609	0.86140	1.0516
0.85	0.03633	1.2047	1.0207	1.1489	0.87037	1.0485
0.86	0.03097	1.1889	1.0179	1.1373	0.87929	1.0454
0.87	0.02613	1.1734	1.0153	1.1259	0.88818	1.0422
0.88	0.02179	1.1583	1.0129	1.1148	0.89703	1.0391
0.89	0.01793	1.1436	1.0108	1.1040	0.90583	1.0359
0.90	0.01451	1.1291	1.0089	1.0934	0.91460	1.0327
0.91	0.01151	1.1150	1.0071	1.0830	0.92332	1.0295
0.92	0.00891	1.101	1.006	1.073	0.93201	1.026
0.93	0.00669	1.088	1.004	1.063	0.94065	1.023
0.94	0.00482	1.074	1.003	1.053	0.94925	1.02
0.95	0.00328	1.061	1.002	1.044	0.95781	1.017
0.96	0.00206	1.049	1.001	1.035	0.96633	1.013
0.97	0.00113	1.036	1.001	1.026	0.97481	1.01
0.98	0.000495	1.024	1	1.017	0.98325	1.007
0.99	0.000121	1.012	1	1.008	0.99165	1.003
1	0	1	1	1	1	1
1.01	0.000117	0.98844	1	0.99176	1.008	0.99666
1.02	0.000459	0.97711	1	0.98369	1.017	0.99331
1.03	0.00101	0.96598	1.001	0.97579	1.025	0.98995
1.04	0.00177	0.95507	1.001	0.96805	1.033	0.98658

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
1.05	0.00271	0.94435	1.002	0.96048	1.041	0.9832
1.06	0.00384	0.93383	1.003	0.95306	1.049	0.97982
1.07	0.00513	0.92349	1.004	0.9458	1.057	0.97642
1.08	0.00658	0.91335	1.005	0.93868	1.065	0.97302
1.09	0.00819	0.90338	1.006	0.9317	1.073	0.9696
1.1	0.00994	0.89359	1.008	0.92486	1.081	0.96618
1.11	0.011816	0.88397	1.01	0.91816	1.089	0.96276
1.12	0.013823	0.87451	1.011	0.91159	1.097	0.95932
1.13	0.015949	0.86522	1.013	0.90515	1.105	0.95589
1.14	0.018188	0.85608	1.015	0.89883	1.113	0.95244
1.15	0.020533	0.8471	1.017	0.89263	1.12	0.94899
1.16	0.022977	0.83826	1.02	0.88655	1.128	0.94554
1.17	0.025516	0.82958	1.022	0.88058	1.136	0.94208
1.18	0.028142	0.82103	1.025	0.87473	1.143	0.93861
1.19	0.030851	0.81263	1.028	0.86899	1.151	0.93515
1.2	0.033638	0.80436	1.03	0.86335	1.158	0.93168
1.21	0.036498	0.79623	1.033	0.85781	1.166	0.9282
1.22	0.039426	0.78822	1.037	0.85238	1.173	0.92473
1.23	0.042418	0.78034	1.04	0.84704	1.181	0.92125
1.24	0.045471	0.77258	1.043	0.84181	1.188	0.91777
1.25	0.048579	0.76495	1.047	0.83666	1.195	0.91429
1.26	0.051739	0.75743	1.05	0.83161	1.202	0.9108
1.27	0.054947	0.75003	1.054	0.82664	1.21	0.90732
1.28	0.058201	0.74274	1.058	0.82176	1.217	0.90383
1.29	0.061497	0.73556	1.062	0.81697	1.224	0.90035
1.3	0.064832	0.72848	1.066	0.81226	1.231	0.89686
1.31	0.068203	0.72152	1.071	0.80763	1.238	0.89338
1.32	0.071607	0.71465	1.075	0.80308	1.245	0.88989
1.33	0.075041	0.70789	1.08	0.7986	1.252	0.88641
1.34	0.078504	0.70122	1.084	0.79421	1.259	0.88292
1.35	0.081991	0.69466	1.089	0.78988	1.266	0.87944
1.36	0.085503	0.68818	1.094	0.78563	1.273	0.87596

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
1.37	0.089035	0.6818	1.099	0.78145	1.28	0.87249
1.38	0.092586	0.67551	1.104	0.77734	1.286	0.86901
1.39	0.096155	0.66931	1.109	0.77329	1.293	0.86554
1.4	0.099738	0.6632	1.115	0.76931	1.3	0.86207
1.41	0.10334	0.65717	1.12	0.76539	1.307	0.8586
1.42	0.10694	0.65122	1.126	0.76154	1.313	0.85514
1.43	0.11056	0.64536	1.132	0.75775	1.32	0.85168
1.44	0.11419	0.63958	1.138	0.75402	1.326	0.84822
1.45	0.11782	0.63387	1.144	0.75035	1.333	0.84477
1.46	0.12146	0.62825	1.15	0.74673	1.339	0.84133
1.47	0.12511	0.62269	1.156	0.74317	1.346	0.83788
1.48	0.12875	0.61722	1.163	0.73967	1.352	0.83445
1.49	0.1324	0.61181	1.169	0.73622	1.358	0.83101
1.5	0.13605	0.60648	1.176	0.73283	1.365	0.82759
1.51	0.1397	0.60122	1.183	0.72948	1.371	0.82416
1.52	0.14335	0.59602	1.19	0.72619	1.377	0.82075
1.53	0.14699	0.59089	1.197	0.72295	1.383	0.81734
1.54	0.15063	0.58583	1.204	0.71975	1.389	0.81393
1.55	0.15427	0.58084	1.212	0.71661	1.395	0.81054
1.56	0.1579	0.57591	1.219	0.71351	1.402	0.80715
1.57	0.16152	0.57104	1.227	0.71046	1.408	0.80376
1.58	0.16514	0.56623	1.234	0.70745	1.414	0.80038
1.59	0.16875	0.56148	1.242	0.70448	1.419	0.79701
1.6	0.17236	0.55679	1.25	0.70156	1.425	0.79365
1.61	0.17595	0.55216	1.258	0.69868	1.431	0.7903
1.62	0.17954	0.54759	1.267	0.69584	1.437	0.78695
1.63	0.18311	0.54308	1.275	0.69305	1.443	0.78361
1.64	0.18667	0.53862	1.284	0.69029	1.449	0.78027
1.65	0.19023	0.53421	1.292	0.68757	1.454	0.77695
1.66	0.19377	0.52986	1.301	0.68489	1.46	0.77363
1.67	0.19729	0.52556	1.31	0.68225	1.466	0.77033
1.68	0.20081	0.52131	1.319	0.67965	1.471	0.76703

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
1.69	0.20431	0.51711	1.328	0.67708	1.477	0.76374
1.7	0.2078	0.51297	1.338	0.67455	1.482	0.76046
1.71	0.21128	0.50887	1.347	0.67205	1.488	0.75718
1.72	0.21474	0.50482	1.357	0.66959	1.493	0.75392
1.73	0.21819	0.50082	1.367	0.66716	1.499	0.75067
1.74	0.22162	0.49686	1.376	0.66476	1.504	0.74742
1.75	0.22504	0.49295	1.386	0.6624	1.51	0.74419
1.76	0.22844	0.48909	1.397	0.66007	1.515	0.74096
1.77	0.23182	0.48527	1.407	0.65777	1.52	0.73774
1.78	0.23519	0.48149	1.418	0.6555	1.526	0.73454
1.79	0.23855	0.47776	1.428	0.65326	1.531	0.73134
1.8	0.24189	0.47407	1.439	0.65105	1.536	0.72816
1.81	0.24521	0.47042	1.45	0.64887	1.541	0.72498
1.82	0.24851	0.46681	1.461	0.64672	1.546	0.72181
1.83	0.2518	0.46324	1.472	0.6446	1.551	0.71866
1.84	0.25507	0.45972	1.484	0.6425	1.556	0.71551
1.85	0.25832	0.45623	1.495	0.64043	1.561	0.71238
1.86	0.26156	0.45278	1.507	0.63839	1.566	0.70925
1.87	0.26478	0.44937	1.519	0.63637	1.571	0.70614
1.88	0.26798	0.446	1.531	0.63439	1.576	0.70304
1.89	0.27116	0.44266	1.543	0.63242	1.581	0.69995
1.9	0.27433	0.43936	1.555	0.63048	1.586	0.69686
1.91	0.27748	0.4361	1.568	0.62857	1.591	0.69379
1.92	0.28061	0.43287	1.58	0.62668	1.596	0.69073
1.93	0.28372	0.42967	1.593	0.62481	1.6	0.68769
1.94	0.28681	0.42651	1.606	0.62297	1.605	0.68465
1.95	0.28989	0.42339	1.619	0.62114	1.61	0.68162
1.96	0.29295	0.42029	1.633	0.61935	1.615	0.67861
1.97	0.29599	0.41724	1.646	0.61757	1.619	0.67561
1.98	0.29901	0.41421	1.66	0.61582	1.624	0.67262
1.99	0.30201	0.41121	1.674	0.61408	1.628	0.66964
2	0.305	0.40825	1.688	0.61237	1.633	0.66667

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
2.01	0.30796	0.40532	1.702	0.61068	1.638	0.66371
2.02	0.31091	0.40241	1.716	0.60901	1.642	0.66076
2.03	0.31384	0.39954	1.73	0.60736	1.646	0.65783
2.04	0.31676	0.3967	1.745	0.60573	1.651	0.65491
2.05	0.31965	0.39388	1.76	0.60412	1.655	0.652
2.06	0.32253	0.3911	1.775	0.60253	1.66	0.6491
2.07	0.32538	0.38834	1.79	0.60096	1.664	0.64621
2.08	0.32822	0.38562	1.806	0.5994	1.668	0.64334
2.09	0.33105	0.38292	1.821	0.59787	1.673	0.64047
2.1	0.33385	0.38024	1.837	0.59635	1.677	0.63762
2.11	0.33664	0.3776	1.853	0.59485	1.681	0.63478
2.12	0.3394	0.37498	1.869	0.59337	1.685	0.63195
2.13	0.34215	0.37239	1.885	0.5919	1.689	0.62914
2.14	0.34489	0.36982	1.902	0.59045	1.694	0.62633
2.15	0.3476	0.36728	1.919	0.58902	1.698	0.62354
2.16	0.3503	0.36476	1.935	0.5876	1.702	0.62076
2.17	0.35298	0.36227	1.953	0.58621	1.706	0.61799
2.18	0.35564	0.3598	1.97	0.58482	1.71	0.61523
2.19	0.35828	0.35736	1.987	0.58345	1.714	0.61249
2.2	0.36091	0.35494	2.005	0.5821	1.718	0.60976
2.21	0.36352	0.35255	2.023	0.58077	1.722	0.60704
2.22	0.36611	0.35017	2.041	0.57944	1.726	0.60433
2.23	0.36869	0.34782	2.059	0.57814	1.73	0.60163
2.24	0.37124	0.3455	2.078	0.57684	1.734	0.59895
2.25	0.37378	0.34319	2.096	0.57557	1.737	0.59627
2.26	0.37631	0.34091	2.115	0.5743	1.741	0.59361
2.27	0.37881	0.33865	2.134	0.57305	1.745	0.59096
2.28	0.3813	0.33641	2.154	0.57182	1.749	0.58833
2.29	0.38377	0.3342	2.173	0.57059	1.753	0.5857
2.3	0.38623	0.332	2.193	0.56938	1.756	0.58309
2.31	0.38867	0.32983	2.213	0.56819	1.76	0.58049
2.32	0.39109	0.32767	2.233	0.567	1.764	0.5779

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
2.33	0.3935	0.32554	2.254	0.56583	1.767	0.57532
2.34	0.39589	0.32342	2.274	0.56467	1.771	0.57276
2.35	0.39826	0.32133	2.295	0.56353	1.775	0.57021
2.36	0.40062	0.31925	2.316	0.5624	1.778	0.56767
2.37	0.40296	0.3172	2.338	0.56127	1.782	0.56514
2.38	0.40529	0.31516	2.359	0.56016	1.785	0.56262
2.39	0.4076	0.31314	2.381	0.55907	1.789	0.56011
2.4	0.40989	0.31114	2.403	0.55798	1.792	0.55762
2.41	0.41217	0.30916	2.425	0.55691	1.796	0.55514
2.42	0.41443	0.3072	2.448	0.55584	1.799	0.55267
2.43	0.41668	0.30525	2.471	0.55479	1.802	0.55021
2.44	0.41891	0.30332	2.494	0.55375	1.806	0.54777
2.45	0.42112	0.30141	2.517	0.55272	1.809	0.54533
2.46	0.42332	0.29952	2.54	0.5517	1.813	0.54291
2.47	0.42551	0.29765	2.564	0.55069	1.816	0.5405
2.48	0.42768	0.29579	2.588	0.54969	1.819	0.5381
2.49	0.42984	0.29394	2.612	0.5487	1.822	0.53571
2.5	0.43198	0.29212	2.637	0.54772	1.826	0.53333
2.51	0.4341	0.29031	2.661	0.54675	1.829	0.53097
2.52	0.43621	0.28852	2.686	0.54579	1.832	0.52862
2.53	0.43831	0.28674	2.712	0.54485	1.835	0.52627
2.54	0.44039	0.28498	2.737	0.54391	1.839	0.52394
2.55	0.44246	0.28323	2.763	0.54298	1.842	0.52163
2.56	0.44451	0.2815	2.789	0.54205	1.845	0.51932
2.57	0.44655	0.27978	2.815	0.54114	1.848	0.51702
2.58	0.44858	0.27808	2.842	0.54024	1.851	0.51474
2.59	0.45059	0.2764	2.869	0.53935	1.854	0.51247
2.6	0.45259	0.27473	2.896	0.53846	1.857	0.5102
2.61	0.45457	0.27307	2.923	0.53759	1.86	0.50795
2.62	0.45654	0.27143	2.951	0.53672	1.863	0.50571
2.63	0.4585	0.2698	2.979	0.53586	1.866	0.50349
2.64	0.46044	0.26818	3.007	0.53501	1.869	0.50127

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
2.65	0.46237	0.26658	3.036	0.53417	1.872	0.49906
2.66	0.46429	0.265	3.065	0.53333	1.875	0.49687
2.67	0.46619	0.26342	3.094	0.53251	1.878	0.49469
2.68	0.46808	0.26186	3.123	0.53169	1.881	0.49251
2.69	0.46996	0.26032	3.153	0.53088	1.884	0.49035
2.7	0.47182	0.25878	3.183	0.53007	1.887	0.4882
2.71	0.47367	0.25726	3.213	0.52928	1.889	0.48606
2.72	0.47551	0.25575	3.244	0.52849	1.892	0.48393
2.73	0.47733	0.25426	3.275	0.52771	1.895	0.48182
2.74	0.47915	0.25278	3.306	0.52694	1.898	0.47971
2.75	0.48095	0.25131	3.338	0.52617	1.901	0.47761
2.76	0.48273	0.24985	3.37	0.52542	1.903	0.47553
2.77	0.48451	0.2484	3.402	0.52467	1.906	0.47345
2.78	0.48627	0.24697	3.434	0.52392	1.909	0.47139
2.79	0.48803	0.24555	3.467	0.52318	1.911	0.46933
2.8	0.48976	0.24414	3.5	0.52245	1.914	0.46729
2.81	0.49149	0.24274	3.534	0.52173	1.917	0.46526
2.82	0.49321	0.24135	3.567	0.52102	1.919	0.46323
2.83	0.49491	0.23998	3.601	0.52031	1.922	0.46122
2.84	0.4966	0.23861	3.636	0.5196	1.925	0.45922
2.85	0.49828	0.23726	3.671	0.5189	1.927	0.45723
2.86	0.49995	0.23592	3.706	0.51821	1.93	0.45525
2.87	0.50161	0.23459	3.741	0.51753	1.932	0.45328
2.88	0.50326	0.23326	3.777	0.51685	1.935	0.45132
2.89	0.50489	0.23195	3.813	0.51618	1.937	0.44937
2.9	0.50652	0.23066	3.85	0.51551	1.94	0.44743
2.91	0.50813	0.22937	3.887	0.51485	1.942	0.4455
2.92	0.50973	0.22809	3.924	0.5142	1.945	0.44358
2.93	0.51132	0.22682	3.961	0.51355	1.947	0.44167
2.94	0.5129	0.22556	3.999	0.51291	1.95	0.43977
2.95	0.51447	0.22431	4.038	0.51227	1.952	0.43788
2.96	0.51603	0.22307	4.076	0.51164	1.954	0.436

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
2.97	0.51758	0.22185	4.115	0.51102	1.957	0.43413
2.98	0.51912	0.22063	4.155	0.5104	1.959	0.43226
2.99	0.52064	0.21942	4.194	0.50978	1.962	0.43041
3	0.52216	0.21822	4.235	0.50918	1.964	0.42857
3.01	0.52367	0.21703	4.275	0.50857	1.966	0.42674
3.02	0.52516	0.21585	4.316	0.50797	1.969	0.42492
3.03	0.52665	0.21467	4.357	0.50738	1.971	0.4231
3.04	0.52813	0.21351	4.399	0.50679	1.973	0.4213
3.05	0.52959	0.21236	4.441	0.50621	1.975	0.41951
3.06	0.53105	0.21121	4.483	0.50563	1.978	0.41772
3.07	0.53249	0.21008	4.526	0.50506	1.98	0.41595
3.08	0.53393	0.20895	4.57	0.50449	1.982	0.41418
3.09	0.53536	0.20783	4.613	0.50393	1.984	0.41242
3.1	0.53678	0.20672	4.657	0.50337	1.987	0.41068
3.11	0.53818	0.20562	4.702	0.50282	1.989	0.40894
3.12	0.53958	0.20453	4.747	0.50227	1.991	0.40721
3.13	0.54097	0.20344	4.792	0.50172	1.993	0.40549
3.14	0.54235	0.20237	4.838	0.50119	1.995	0.40378
3.15	0.54372	0.2013	4.884	0.50065	1.997	0.40208
3.16	0.54509	0.20024	4.93	0.50012	2	0.40038
3.17	0.54644	0.19919	4.977	0.49959	2.002	0.3987
3.18	0.54778	0.19814	5.025	0.49907	2.004	0.39702
3.19	0.54912	0.19711	5.073	0.49856	2.006	0.39536
3.2	0.55044	0.19608	5.121	0.49804	2.008	0.3937
3.21	0.55176	0.19506	5.17	0.49753	2.01	0.39205
3.22	0.55307	0.19405	5.219	0.49703	2.012	0.39041
3.23	0.55437	0.19304	5.268	0.49653	2.014	0.38878
3.24	0.55566	0.19204	5.319	0.49603	2.016	0.38716
3.25	0.55694	0.19105	5.369	0.49554	2.018	0.38554
3.26	0.55822	0.19007	5.42	0.49505	2.02	0.38394
3.27	0.55948	0.18909	5.472	0.49457	2.022	0.38234
3.28	0.56074	0.18812	5.523	0.49409	2.024	0.38075

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
3.29	0.56199	0.18716	5.576	0.49361	2.026	0.37917
3.3	0.56323	0.18621	5.629	0.49314	2.028	0.3776
3.31	0.56446	0.18526	5.682	0.49267	2.03	0.37603
3.32	0.56569	0.18432	5.736	0.49221	2.032	0.37448
3.33	0.56691	0.18339	5.79	0.49175	2.034	0.37293
3.34	0.56812	0.18246	5.845	0.49129	2.035	0.37139
3.35	0.56932	0.18154	5.9	0.49084	2.037	0.36986
3.36	0.57051	0.18063	5.956	0.49039	2.039	0.36833
3.37	0.5717	0.17972	6.012	0.48994	2.041	0.36682
3.38	0.57287	0.17882	6.069	0.4895	2.043	0.36531
3.39	0.57404	0.17793	6.126	0.48906	2.045	0.36381
3.4	0.57521	0.17704	6.184	0.48862	2.047	0.36232
3.41	0.57636	0.17616	6.242	0.48819	2.048	0.36083
3.42	0.57751	0.17528	6.301	0.48776	2.05	0.35936
3.43	0.57865	0.17441	6.36	0.48734	2.052	0.35789
3.44	0.57978	0.17355	6.42	0.48692	2.054	0.35643
3.45	0.58091	0.1727	6.48	0.4865	2.056	0.35498
3.46	0.58203	0.17185	6.541	0.48608	2.057	0.35353
3.47	0.58314	0.171	6.602	0.48567	2.059	0.35209
3.48	0.58424	0.17016	6.664	0.48526	2.061	0.35066
3.49	0.58534	0.16933	6.727	0.48485	2.062	0.34924
3.5	0.58643	0.16851	6.79	0.48445	2.064	0.34783
3.51	0.58751	0.16768	6.853	0.48405	2.066	0.34642
3.52	0.58859	0.16687	6.917	0.48366	2.068	0.34502
3.53	0.58966	0.16606	6.982	0.48326	2.069	0.34362
3.54	0.59072	0.16526	7.047	0.48287	2.071	0.34224
3.55	0.59178	0.16446	7.113	0.48248	2.073	0.34086
3.56	0.59282	0.16367	7.179	0.4821	2.074	0.33949
3.57	0.59387	0.16288	7.246	0.48172	2.076	0.33813
3.58	0.5949	0.1621	7.313	0.48134	2.078	0.33677
3.59	0.59593	0.16132	7.381	0.48096	2.079	0.33542
3.6	0.59695	0.16055	7.45	0.48059	2.081	0.33408

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
3.61	0.59797	0.15979	7.519	0.48022	2.082	0.33274
3.62	0.59898	0.15903	7.589	0.47985	2.084	0.33141
3.63	0.59998	0.15827	7.659	0.47949	2.086	0.33009
3.64	0.60098	0.15752	7.73	0.47913	2.087	0.32877
3.65	0.60197	0.15678	7.802	0.47877	2.089	0.32747
3.66	0.60296	0.15604	7.874	0.47841	2.09	0.32616
3.67	0.60394	0.15531	7.947	0.47806	2.092	0.32487
3.68	0.60491	0.15458	8.02	0.4777	2.093	0.32358
3.69	0.60588	0.15385	8.094	0.47736	2.095	0.3223
3.7	0.60684	0.15313	8.169	0.47701	2.096	0.32103
3.71	0.60779	0.15242	8.244	0.47667	2.098	0.31976
3.72	0.60874	0.15171	8.32	0.47633	2.099	0.3185
3.73	0.60968	0.151	8.397	0.47599	2.101	0.31724
3.74	0.61062	0.1503	8.474	0.47565	2.102	0.316
3.75	0.61155	0.14961	8.552	0.47532	2.104	0.31475
3.76	0.61247	0.14892	8.63	0.47499	2.105	0.31352
3.77	0.61339	0.14823	8.709	0.47466	2.107	0.31229
3.78	0.61431	0.14755	8.789	0.47433	2.108	0.31107
3.79	0.61522	0.14687	8.869	0.47401	2.11	0.30985
3.8	0.61612	0.1462	8.951	0.47368	2.111	0.30864
3.81	0.61702	0.14553	9.032	0.47336	2.113	0.30744
3.82	0.61791	0.14487	9.115	0.47305	2.114	0.30624
3.83	0.61879	0.14421	9.198	0.47273	2.115	0.30505
3.84	0.61968	0.14355	9.282	0.47242	2.117	0.30387
3.85	0.62055	0.1429	9.366	0.47211	2.118	0.30269
3.86	0.62142	0.14225	9.451	0.4718	2.12	0.30151
3.87	0.62229	0.14161	9.537	0.4715	2.121	0.30035
3.88	0.62315	0.14097	9.624	0.47119	2.122	0.29919
3.89	0.624	0.14034	9.711	0.47089	2.124	0.29803
3.9	0.62485	0.13971	9.799	0.47059	2.125	0.29688
3.91	0.62569	0.13908	9.888	0.47029	2.126	0.29574
3.92	0.62653	0.13846	9.977	0.47	2.128	0.2946

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
3.93	0.62737	0.13784	10.07	0.4697	2.129	0.29347
3.94	0.62819	0.13723	10.16	0.46941	2.13	0.29235
3.95	0.62902	0.13662	10.25	0.46912	2.132	0.29123
3.96	0.62984	0.13602	10.34	0.46884	2.133	0.29011
3.97	0.63065	0.13541	10.44	0.46855	2.134	0.289
3.98	0.63146	0.13482	10.53	0.46827	2.136	0.2879
3.99	0.63227	0.13422	10.62	0.46799	2.137	0.28681
4	0.63306	0.13363	10.72	0.46771	2.138	0.28571
4.01	0.63386	0.13304	10.81	0.46743	2.139	0.28463
4.02	0.63465	0.13246	10.91	0.46715	2.141	0.28355
4.03	0.63544	0.13188	11.01	0.46688	2.142	0.28247
4.04	0.63622	0.13131	11.11	0.46661	2.143	0.2814
4.05	0.63699	0.13073	11.21	0.46634	2.144	0.28034
4.06	0.63776	0.13017	11.31	0.46607	2.146	0.27928
4.07	0.63853	0.1296	11.41	0.4658	2.147	0.27823
4.08	0.63929	0.12904	11.51	0.46554	2.148	0.27718
4.09	0.64005	0.12848	11.61	0.46528	2.149	0.27614
4.1	0.6408	0.12793	11.71	0.46502	2.15	0.2751
4.11	0.64155	0.12738	11.82	0.46476	2.152	0.27407
4.12	0.6423	0.12683	11.92	0.4645	2.153	0.27304
4.13	0.64304	0.12629	12.03	0.46424	2.154	0.27202
4.14	0.64377	0.12574	12.14	0.46399	2.155	0.27101
4.15	0.64451	0.12521	12.24	0.46374	2.156	0.27
4.16	0.64523	0.12467	12.35	0.46349	2.158	0.26899
4.17	0.64596	0.12414	12.46	0.46324	2.159	0.26799
4.18	0.64668	0.12362	12.57	0.46299	2.16	0.26699
4.19	0.64739	0.12309	12.68	0.46275	2.161	0.266
4.2	0.6481	0.12257	12.79	0.4625	2.162	0.26502
4.21	0.64881	0.12205	12.9	0.46226	2.163	0.26404
4.22	0.64951	0.12154	13.02	0.46202	2.164	0.26306
4.23	0.65021	0.12103	13.13	0.46178	2.166	0.26209
4.24	0.6509	0.12052	13.25	0.46154	2.167	0.26112

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
4.25	0.65159	0.12001	13.36	0.46131	2.168	0.26016
4.26	0.65228	0.11951	13.48	0.46107	2.169	0.25921
4.27	0.65296	0.11901	13.6	0.46084	2.17	0.25825
4.28	0.65364	0.11852	13.72	0.46061	2.171	0.25731
4.29	0.65432	0.11802	13.83	0.46038	2.172	0.25637
4.3	0.65499	0.11753	13.95	0.46015	2.173	0.25543
4.31	0.65565	0.11705	14.08	0.45992	2.174	0.2545
4.32	0.65632	0.11656	14.2	0.4597	2.175	0.25357
4.33	0.65698	0.11608	14.32	0.45947	2.176	0.25264
4.34	0.65763	0.1156	14.45	0.45925	2.177	0.25172
4.35	0.65828	0.11513	14.57	0.45903	2.179	0.25081
4.36	0.65893	0.11466	14.7	0.45881	2.18	0.2499
4.37	0.65958	0.11419	14.82	0.45859	2.181	0.24899
4.38	0.66022	0.11372	14.95	0.45837	2.182	0.24809
4.39	0.66085	0.11326	15.08	0.45816	2.183	0.2472
4.4	0.66149	0.11279	15.21	0.45794	2.184	0.24631
4.41	0.66212	0.11233	15.34	0.45773	2.185	0.24542
4.42	0.66275	0.11188	15.47	0.45752	2.186	0.24453
4.43	0.66337	0.11143	15.61	0.45731	2.187	0.24366
4.44	0.66399	0.11097	15.74	0.4571	2.188	0.24278
4.45	0.6646	0.11053	15.87	0.45689	2.189	0.24191
4.46	0.66522	0.11008	16.01	0.45668	2.19	0.24105
4.47	0.66583	0.10964	16.15	0.45648	2.191	0.24018
4.48	0.66643	0.1092	16.28	0.45628	2.192	0.23933
4.49	0.66704	0.10876	16.42	0.45607	2.193	0.23847
4.5	0.66763	0.10833	16.56	0.45587	2.194	0.23762
4.51	0.66823	0.10789	16.7	0.45567	2.195	0.23678
4.52	0.66882	0.10746	16.84	0.45547	2.196	0.23594
4.53	0.66941	0.10704	16.99	0.45528	2.196	0.2351
4.54	0.67	0.10661	17.13	0.45508	2.197	0.23427
4.55	0.67058	0.10619	17.28	0.45488	2.198	0.23344
4.56	0.67116	0.10577	17.42	0.45469	2.199	0.23262

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
4.57	0.67174	0.10535	17.57	0.4545	2.2	0.2318
4.58	0.67231	0.10494	17.72	0.45431	2.201	0.23098
4.59	0.67288	0.10452	17.87	0.45412	2.202	0.23017
4.6	0.67345	0.10411	18.02	0.45393	2.203	0.22936
4.61	0.67401	0.1037	18.17	0.45374	2.204	0.22855
4.62	0.67457	0.1033	18.32	0.45355	2.205	0.22775
4.63	0.67513	0.10289	18.48	0.45337	2.206	0.22696
4.64	0.67569	0.10249	18.63	0.45318	2.207	0.22616
4.65	0.67624	0.10209	18.79	0.453	2.208	0.22537
4.66	0.67679	0.1017	18.94	0.45282	2.208	0.22459
4.67	0.67733	0.1013	19.1	0.45263	2.209	0.22381
4.68	0.67788	0.10091	19.26	0.45245	2.21	0.22303
4.69	0.67842	0.10052	19.42	0.45227	2.211	0.22225
4.7	0.67895	0.10013	19.58	0.4521	2.212	0.22148
4.71	0.67949	0.099746	19.75	0.45192	2.213	0.22072
4.72	0.68002	0.099363	19.91	0.45174	2.214	0.21995
4.73	0.68055	0.098982	20.07	0.45157	2.215	0.21919
4.74	0.68107	0.098602	20.24	0.45139	2.215	0.21844
4.75	0.68159	0.098225	20.41	0.45122	2.216	0.21769
4.76	0.68211	0.09785	20.58	0.45105	2.217	0.21694
4.77	0.68263	0.097477	20.75	0.45088	2.218	0.21619
4.78	0.68315	0.097106	20.92	0.45071	2.219	0.21545
4.79	0.68366	0.096738	21.09	0.45054	2.22	0.21471
4.8	0.68417	0.096371	21.26	0.45037	2.22	0.21398
4.81	0.68467	0.096006	21.44	0.45021	2.221	0.21325
4.82	0.68518	0.095643	21.61	0.45004	2.222	0.21252
4.83	0.68568	0.095283	21.79	0.44988	2.223	0.2118
4.84	0.68618	0.094924	21.97	0.44971	2.224	0.21108
4.85	0.68667	0.094567	22.15	0.44955	2.224	0.21036
4.86	0.68717	0.094212	22.33	0.44939	2.225	0.20965
4.87	0.68766	0.093859	22.51	0.44923	2.226	0.20894
4.88	0.68814	0.093508	22.7	0.44907	2.227	0.20823

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
4.89	0.68863	0.093159	22.88	0.44891	2.228	0.20753
4.9	0.68911	0.092812	23.07	0.44875	2.228	0.20683
4.91	0.68959	0.092467	23.25	0.44859	2.229	0.20613
4.92	0.69007	0.092124	23.44	0.44843	2.23	0.20543
4.93	0.69055	0.091782	23.63	0.44828	2.231	0.20474
4.94	0.69102	0.091443	23.82	0.44812	2.232	0.20406
4.95	0.69149	0.091105	24.02	0.44797	2.232	0.20337
4.96	0.69196	0.090769	24.21	0.44782	2.233	0.20269
4.97	0.69242	0.090435	24.41	0.44766	2.234	0.20201
4.98	0.69288	0.090102	24.6	0.44751	2.235	0.20134
4.99	0.69335	0.089772	24.8	0.44736	2.235	0.20067
5	0.6938	0.089443	25	0.44721	2.236	0.2
5.02	0.69471	0.08879	25.4	0.44692	2.238	0.19867
5.04	0.69561	0.088145	25.81	0.44662	2.239	0.19736
5.06	0.6965	0.087506	26.22	0.44633	2.24	0.19606
5.08	0.69739	0.086874	26.64	0.44605	2.242	0.19476
5.1	0.69826	0.086249	27.07	0.44576	2.243	0.19349
5.12	0.69912	0.08563	27.5	0.44548	2.245	0.19222
5.14	0.69998	0.085018	27.94	0.44521	2.246	0.19096
5.16	0.70083	0.084412	28.38	0.44493	2.248	0.18972
5.18	0.70166	0.083813	28.83	0.44466	2.249	0.18849
5.2	0.70249	0.08322	29.28	0.44439	2.25	0.18727
5.22	0.70332	0.082633	29.74	0.44413	2.252	0.18606
5.24	0.70413	0.082051	30.21	0.44387	2.253	0.18486
5.26	0.70493	0.081476	30.68	0.44361	2.254	0.18367
5.28	0.70573	0.080907	31.16	0.44335	2.256	0.18249
5.3	0.70652	0.080344	31.65	0.4431	2.257	0.18132
5.32	0.7073	0.079786	32.14	0.44284	2.258	0.18017
5.34	0.70808	0.079234	32.64	0.4426	2.259	0.17902
5.36	0.70884	0.078687	33.14	0.44235	2.261	0.17789
5.38	0.7096	0.078146	33.66	0.44211	2.262	0.17676
5.4	0.71035	0.077611	34.17	0.44186	2.263	0.17564

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
5.42	0.7111	0.077081	34.7	0.44163	2.264	0.17454
5.44	0.71184	0.076556	35.23	0.44139	2.266	0.17344
5.46	0.71257	0.076036	35.77	0.44116	2.267	0.17236
5.48	0.71329	0.075522	36.32	0.44093	2.268	0.17128
5.5	0.714	0.075012	36.87	0.4407	2.269	0.17021
5.52	0.71471	0.074508	37.43	0.44047	2.27	0.16916
5.54	0.71542	0.074009	38	0.44025	2.271	0.16811
5.56	0.71611	0.073514	38.57	0.44003	2.273	0.16707
5.58	0.7168	0.073025	39.15	0.43981	2.274	0.16604
5.6	0.71748	0.07254	39.74	0.43959	2.275	0.16502
5.62	0.71816	0.07206	40.34	0.43938	2.276	0.164
5.64	0.71883	0.071584	40.94	0.43916	2.277	0.163
5.66	0.71949	0.071113	41.55	0.43895	2.278	0.16201
5.68	0.72015	0.070647	42.17	0.43874	2.279	0.16102
5.7	0.7208	0.070185	42.8	0.43854	2.28	0.16004
5.72	0.72144	0.069727	43.43	0.43833	2.281	0.15907
5.74	0.72208	0.069274	44.07	0.43813	2.282	0.15811
5.76	0.72272	0.068825	44.72	0.43793	2.283	0.15716
5.78	0.72334	0.068381	45.38	0.43773	2.284	0.15622
5.8	0.72397	0.067941	46.05	0.43754	2.286	0.15528
5.82	0.72458	0.067504	46.72	0.43734	2.287	0.15435
5.84	0.72519	0.067072	47.41	0.43715	2.288	0.15343
5.86	0.7258	0.066644	48.1	0.43696	2.289	0.15252
5.88	0.72639	0.06622	48.8	0.43677	2.29	0.15161
5.9	0.72699	0.0658	49.51	0.43658	2.291	0.15072
5.92	0.72758	0.065384	50.22	0.4364	2.291	0.14983
5.94	0.72816	0.064972	50.95	0.43622	2.292	0.14894
5.96	0.72874	0.064563	51.68	0.43604	2.293	0.14807
5.98	0.72931	0.064159	52.43	0.43586	2.294	0.1472
6	0.72988	0.063758	53.18	0.43568	2.295	0.14634
6.02	0.73044	0.06336	53.94	0.4355	2.296	0.14549
6.04	0.73099	0.062967	54.71	0.43533	2.297	0.14464

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
6.06	0.73155	0.062577	55.49	0.43515	2.298	0.1438
6.08	0.73209	0.06219	56.28	0.43498	2.299	0.14297
6.1	0.73264	0.061807	57.08	0.43481	2.3	0.14215
6.12	0.73317	0.061428	57.88	0.43464	2.301	0.14133
6.14	0.73371	0.061051	58.7	0.43448	2.302	0.14052
6.16	0.73423	0.060679	59.53	0.43431	2.302	0.13971
6.18	0.73476	0.060309	60.36	0.43415	2.303	0.13891
6.2	0.73528	0.059943	61.21	0.43399	2.304	0.13812
6.22	0.73579	0.05958	62.07	0.43383	2.305	0.13734
6.24	0.7363	0.059221	62.93	0.43367	2.306	0.13656
6.26	0.73681	0.058864	63.81	0.43351	2.307	0.13578
6.28	0.73731	0.058511	64.69	0.43336	2.308	0.13502
6.3	0.7378	0.058161	65.59	0.4332	2.308	0.13426
6.32	0.7383	0.057814	66.5	0.43305	2.309	0.1335
6.34	0.73879	0.05747	67.41	0.4329	2.31	0.13276
6.36	0.73927	0.057129	68.34	0.43275	2.311	0.13201
6.38	0.73975	0.056791	69.28	0.4326	2.312	0.13128
6.4	0.74022	0.056455	70.23	0.43245	2.312	0.13055
6.42	0.7407	0.056123	71.19	0.4323	2.313	0.12982
6.44	0.74116	0.055794	72.16	0.43216	2.314	0.12911
6.46	0.74163	0.055467	73.14	0.43201	2.315	0.12839
6.48	0.74209	0.055144	74.13	0.43187	2.316	0.12769
6.5	0.74254	0.054823	75.13	0.43173	2.316	0.12698
6.52	0.743	0.054505	76.15	0.43159	2.317	0.12629
6.54	0.74344	0.054189	77.18	0.43145	2.318	0.1256
6.56	0.74389	0.053876	78.21	0.43131	2.318	0.12491
6.58	0.74433	0.053566	79.26	0.43118	2.319	0.12423
6.6	0.74477	0.053259	80.32	0.43104	2.32	0.12356
6.62	0.7452	0.052954	81.4	0.43091	2.321	0.12289
6.64	0.74563	0.052652	82.48	0.43078	2.321	0.12223
6.66	0.74606	0.052352	83.58	0.43064	2.322	0.12157
6.68	0.74648	0.052055	84.68	0.43051	2.323	0.12091

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
6.7	0.7469	0.05176	85.8	0.43038	2.324	0.12026
6.72	0.74732	0.051468	86.94	0.43026	2.324	0.11962
6.74	0.74773	0.051178	88.08	0.43013	2.325	0.11898
6.76	0.74814	0.05089	89.24	0.43	2.326	0.11835
6.78	0.74855	0.050605	90.41	0.42988	2.326	0.11772
6.8	0.74895	0.050322	91.59	0.42975	2.327	0.1171
6.82	0.74935	0.050042	92.79	0.42963	2.328	0.11648
6.84	0.74974	0.049764	94	0.42951	2.328	0.11586
6.86	0.75014	0.049488	95.22	0.42939	2.329	0.11525
6.88	0.75053	0.049215	96.45	0.42927	2.33	0.11465
6.9	0.75091	0.048943	97.7	0.42915	2.33	0.11405
6.92	0.7513	0.048674	98.96	0.42903	2.331	0.11345
6.94	0.75168	0.048407	$1.0E+2$	0.42892	2.331	0.11286
6.96	0.75206	0.048142	$1.0E+2$	0.4288	2.332	0.11227
6.98	0.75243	0.04788	$1.0E+2$	0.42869	2.333	0.11169
7	0.7528	0.047619	$1.0E+2$	0.42857	2.333	0.11111
7.02	0.75317	0.047361	$1.1E+2$	0.42846	2.334	0.11054
7.04	0.75354	0.047104	$1.1E+2$	0.42835	2.335	0.10997
7.06	0.7539	0.04685	$1.1E+2$	0.42824	2.335	0.1094
7.08	0.75426	0.046597	$1.1E+2$	0.42813	2.336	0.10884
7.1	0.75462	0.046347	$1.1E+2$	0.42802	2.336	0.10828
7.12	0.75497	0.046099	$1.1E+2$	0.42791	2.337	0.10773
7.14	0.75532	0.045852	$1.1E+2$	0.4278	2.338	0.10718
7.16	0.75567	0.045608	$1.2E+2$	0.42769	2.338	0.10664
7.18	0.75602	0.045365	$1.2E+2$	0.42759	2.339	0.1061
7.2	0.75636	0.045125	$1.2E+2$	0.42748	2.339	0.10556
7.22	0.7567	0.044886	$1.2E+2$	0.42738	2.34	0.10503
7.24	0.75704	0.044649	$1.2E+2$	0.42728	2.34	0.1045
7.26	0.75738	0.044414	$1.2E+2$	0.42717	2.341	0.10397
7.28	0.75771	0.044181	$1.2E+2$	0.42707	2.342	0.10345
7.3	0.75804	0.04395	$1.3E+2$	0.42697	2.342	0.10293
7.32	0.75837	0.04372	$1.3E+2$	0.42687	2.343	0.10242

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
7.34	0.7587	0.043492	$1.3E+2$	0.42677	2.343	0.10191
7.36	0.75902	0.043266	$1.3E+2$	0.42667	2.344	0.1014
7.38	0.75934	0.043042	$1.3E+2$	0.42658	2.344	0.1009
7.4	0.75966	0.042819	$1.3E+2$	0.42648	2.345	0.1004
7.42	0.75997	0.042598	$1.4E+2$	0.42638	2.345	0.099906
7.44	0.76029	0.042379	$1.4E+2$	0.42629	2.346	0.099414
7.46	0.7606	0.042161	$1.4E+2$	0.42619	2.346	0.098926
7.48	0.76091	0.041946	$1.4E+2$	0.4261	2.347	0.098441
7.5	0.76121	0.041731	$1.4E+2$	0.42601	2.347	0.097959
7.52	0.76152	0.041519	$1.4E+2$	0.42591	2.348	0.097481
7.54	0.76182	0.041307	$1.5E+2$	0.42582	2.348	0.097006
7.56	0.76212	0.041098	$1.5E+2$	0.42573	2.349	0.096535
7.58	0.76242	0.04089	$1.5E+2$	0.42564	2.349	0.096067
7.6	0.76271	0.040684	$1.5E+2$	0.42555	2.35	0.095602
7.62	0.76301	0.040479	$1.5E+2$	0.42546	2.35	0.095141
7.64	0.7633	0.040276	$1.5E+2$	0.42537	2.351	0.094683
7.66	0.76359	0.040074	$1.6E+2$	0.42529	2.351	0.094228
7.68	0.76387	0.039873	$1.6E+2$	0.4252	2.352	0.093776
7.7	0.76416	0.039675	$1.6E+2$	0.42511	2.352	0.093327
7.72	0.76444	0.039477	$1.6E+2$	0.42503	2.353	0.092882
7.74	0.76472	0.039281	$1.6E+2$	0.42494	2.353	0.092439
7.76	0.765	0.039087	$1.7E+2$	0.42486	2.354	0.092
7.78	0.76528	0.038894	$1.7E+2$	0.42478	2.354	0.091563
7.8	0.76555	0.038702	$1.7E+2$	0.42469	2.355	0.09113
7.82	0.76582	0.038512	$1.7E+2$	0.42461	2.355	0.0907
7.84	0.76609	0.038323	$1.7E+2$	0.42453	2.356	0.090272
7.86	0.76636	0.038136	$1.8E+2$	0.42445	2.356	0.089848
7.88	0.76663	0.03795	$1.8E+2$	0.42437	2.356	0.089426
7.9	0.7669	0.037765	$1.8E+2$	0.42429	2.357	0.089008
7.92	0.76716	0.037581	$1.8E+2$	0.42421	2.357	0.088592
7.94	0.76742	0.037399	$1.8E+2$	0.42413	2.358	0.088179
7.96	0.76768	0.037218	$1.9E+2$	0.42405	2.358	0.087769

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
7.98	0.76794	0.037039	$1.9E+2$	0.42397	2.359	0.087361
8	0.76819	0.03686	$1.9E+2$	0.4239	2.359	0.086957
8.02	0.76845	0.036683	$1.9E+2$	0.42382	2.359	0.086555
8.04	0.7687	0.036508	$1.9E+2$	0.42374	2.36	0.086155
8.06	0.76895	0.036333	$2.0E+2$	0.42367	2.36	0.085759
8.08	0.7692	0.03616	$2.0E+2$	0.42359	2.361	0.085365
8.1	0.76944	0.035988	$2.0E+2$	0.42352	2.361	0.084974
8.12	0.76969	0.035817	$2.0E+2$	0.42344	2.362	0.084585
8.14	0.76993	0.035648	$2.1E+2$	0.42337	2.362	0.084199
8.16	0.77017	0.035479	$2.1E+2$	0.4233	2.362	0.083816
8.18	0.77041	0.035312	$2.1E+2$	0.42323	2.363	0.083435
8.2	0.77065	0.035146	$2.1E+2$	0.42315	2.363	0.083056
8.22	0.77089	0.034981	$2.2E+2$	0.42308	2.364	0.082681
8.24	0.77112	0.034817	$2.2E+2$	0.42301	2.364	0.082307
8.26	0.77136	0.034654	$2.2E+2$	0.42294	2.364	0.081936
8.28	0.77159	0.034493	$2.2E+2$	0.42287	2.365	0.081568
8.3	0.77182	0.034332	$2.3E+2$	0.4228	2.365	0.081202
8.32	0.77205	0.034173	$2.3E+2$	0.42274	2.366	0.080838
8.34	0.77228	0.034015	$2.3E+2$	0.42267	2.366	0.080477
8.36	0.7725	0.033858	$2.3E+2$	0.4226	2.366	0.080118
8.38	0.77273	0.033702	$2.4E+2$	0.42253	2.367	0.079761
8.4	0.77295	0.033547	$2.4E+2$	0.42247	2.367	0.079407
8.42	0.77317	0.033393	$2.4E+2$	0.4224	2.367	0.079055
8.44	0.77339	0.03324	$2.4E+2$	0.42233	2.368	0.078705
8.46	0.77361	0.033088	$2.5E+2$	0.42227	2.368	0.078358
8.48	0.77382	0.032937	$2.5E+2$	0.4222	2.369	0.078013
8.5	0.77404	0.032787	$2.5E+2$	0.42214	2.369	0.07767
8.52	0.77425	0.032639	$2.5E+2$	0.42207	2.369	0.077329
8.54	0.77447	0.032491	$2.6E+2$	0.42201	2.37	0.076991
8.56	0.77468	0.032344	$2.6E+2$	0.42195	2.37	0.076654
8.58	0.77489	0.032198	$2.6E+2$	0.42188	2.37	0.07632
8.6	0.77509	0.032053	$2.7E+2$	0.42182	2.371	0.075988

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
8.62	0.7753	0.031909	$2.7E+2$	0.42176	2.371	0.075658
8.64	0.77551	0.031767	$2.7E+2$	0.4217	2.371	0.07533
8.66	0.77571	0.031625	$2.7E+2$	0.42164	2.372	0.075004
8.68	0.77591	0.031484	$2.8E+2$	0.42158	2.372	0.07468
8.7	0.77611	0.031343	$2.8E+2$	0.42152	2.372	0.074359
8.72	0.77632	0.031204	$2.8E+2$	0.42146	2.373	0.074039
8.74	0.77651	0.031066	$2.9E+2$	0.4214	2.373	0.073721
8.76	0.77671	0.030929	$2.9E+2$	0.42134	2.373	0.073406
8.78	0.77691	0.030792	$2.9E+2$	0.42128	2.374	0.073092
8.8	0.7771	0.030657	$2.9E+2$	0.42122	2.374	0.07278
8.82	0.7773	0.030522	$3.0E+2$	0.42116	2.374	0.07247
8.84	0.77749	0.030388	$3.0E+2$	0.42111	2.375	0.072163
8.86	0.77768	0.030255	$3.0E+2$	0.42105	2.375	0.071857
8.88	0.77787	0.030123	$3.1E+2$	0.42099	2.375	0.071553
8.9	0.77806	0.029992	$3.1E+2$	0.42094	2.376	0.07125
8.92	0.77825	0.029862	$3.1E+2$	0.42088	2.376	0.07095
8.94	0.77843	0.029732	$3.2E+2$	0.42082	2.376	0.070652
8.96	0.77862	0.029603	$3.2E+2$	0.42077	2.377	0.070355
8.98	0.7788	0.029475	$3.2E+2$	0.42071	2.377	0.07006
9	0.77899	0.029348	$3.3E+2$	0.42066	2.377	0.069767
9.02	0.77917	0.029222	$3.3E+2$	0.42061	2.378	0.069476
9.04	0.77935	0.029097	$3.3E+2$	0.42055	2.378	0.069187
9.06	0.77953	0.028972	$3.4E+2$	0.4205	2.378	0.068899
9.08	0.77971	0.028848	$3.4E+2$	0.42045	2.378	0.068613
9.1	0.77988	0.028725	$3.4E+2$	0.42039	2.379	0.068329
9.12	0.78006	0.028603	$3.5E+2$	0.42034	2.379	0.068047
9.14	0.78023	0.028481	$3.5E+2$	0.42029	2.379	0.067766
9.16	0.78041	0.028361	$3.6E+2$	0.42024	2.38	0.067487
9.18	0.78058	0.028241	$3.6E+2$	0.42018	2.38	0.06721
9.2	0.78075	0.028121	$3.6E+2$	0.42013	2.38	0.066934
9.22	0.78092	0.028003	$3.7E+2$	0.42008	2.38	0.06666
9.24	0.78109	0.027885	$3.7E+2$	0.42003	2.381	0.066388

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
9.26	0.78126	0.027768	$3.7E+2$	0.41998	2.381	0.066117
9.28	0.78143	0.027652	$3.8E+2$	0.41993	2.381	0.065848
9.3	0.78159	0.027536	$3.8E+2$	0.41988	2.382	0.065581
9.32	0.78176	0.027421	$3.9E+2$	0.41983	2.382	0.065315
9.34	0.78192	0.027307	$3.9E+2$	0.41978	2.382	0.065051
9.36	0.78209	0.027194	$3.9E+2$	0.41974	2.382	0.064788
9.38	0.78225	0.027081	$4.0E+2$	0.41969	2.383	0.064527
9.4	0.78241	0.026969	$4.0E+2$	0.41964	2.383	0.064267
9.42	0.78257	0.026858	$4.0E+2$	0.41959	2.383	0.064009
9.44	0.78273	0.026747	$4.1E+2$	0.41955	2.384	0.063753
9.46	0.78289	0.026637	$4.1E+2$	0.4195	2.384	0.063498
9.48	0.78305	0.026528	$4.2E+2$	0.41945	2.384	0.063244
9.5	0.7832	0.026419	$4.2E+2$	0.4194	2.384	0.062992
9.52	0.78336	0.026311	$4.3E+2$	0.41936	2.385	0.062742
9.54	0.78351	0.026204	$4.3E+2$	0.41931	2.385	0.062492
9.56	0.78367	0.026097	$4.3E+2$	0.41927	2.385	0.062245
9.58	0.78382	0.025991	$4.4E+2$	0.41922	2.385	0.061999
9.6	0.78397	0.025886	$4.4E+2$	0.41918	2.386	0.061754
9.62	0.78412	0.025781	$4.5E+2$	0.41913	2.386	0.06151
9.64	0.78427	0.025677	$4.5E+2$	0.41909	2.386	0.061269
9.66	0.78442	0.025573	$4.6E+2$	0.41904	2.386	0.061028
9.68	0.78457	0.02547	$4.6E+2$	0.419	2.387	0.060789
9.7	0.78472	0.025368	$4.6E+2$	0.41896	2.387	0.060551
9.72	0.78487	0.025266	$4.7E+2$	0.41891	2.387	0.060315
9.74	0.78501	0.025165	$4.7E+2$	0.41887	2.387	0.06008
9.76	0.78516	0.025065	$4.8E+2$	0.41883	2.388	0.059846
9.78	0.7853	0.024965	$4.8E+2$	0.41878	2.388	0.059613
9.8	0.78544	0.024866	$4.9E+2$	0.41874	2.388	0.059382
9.82	0.78559	0.024767	$4.9E+2$	0.4187	2.388	0.059153
9.84	0.78573	0.024669	$5.0E+2$	0.41866	2.389	0.058924
9.86	0.78587	0.024571	$5.0E+2$	0.41861	2.389	0.058697
9.88	0.78601	0.024475	$5.1E+2$	0.41857	2.389	0.058471

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
9.9	0.78615	0.024378	$5.1E+2$	0.41853	2.389	0.058247
9.92	0.78629	0.024282	$5.2E+2$	0.41849	2.39	0.058023
9.94	0.78642	0.024187	$5.2E+2$	0.41845	2.39	0.057801
9.96	0.78656	0.024092	$5.3E+2$	0.41841	2.39	0.057581
9.98	0.7867	0.023998	$5.3E+2$	0.41837	2.39	0.057361
10	0.78683	0.023905	$5.4E+2$	0.41833	2.39	0.057143
10.1	0.78749	0.023445	$5.6E+2$	0.41813	2.392	0.05607
10.2	0.78814	0.022998	$5.9E+2$	0.41794	2.393	0.055026
10.3	0.78877	0.022563	$6.2E+2$	0.41776	2.394	0.05401
10.4	0.78938	0.022141	$6.5E+2$	0.41758	2.395	0.053022
10.5	0.78997	0.02173	$6.7E+2$	0.4174	2.396	0.052061
10.6	0.79055	0.021331	$7.1E+2$	0.41723	2.397	0.051125
10.7	0.79111	0.020942	$7.4E+2$	0.41707	2.398	0.050213
10.8	0.79165	0.020564	$7.7E+2$	0.41691	2.399	0.049326
10.9	0.79219	0.020196	$8.1E+2$	0.41675	2.4	0.048461
11	0.7927	0.019838	$8.4E+2$	0.4166	2.4	0.047619
11.1	0.79321	0.019489	$8.8E+2$	0.41645	2.401	0.046798
11.2	0.7937	0.019149	$9.2E+2$	0.41631	2.402	0.045998
11.3	0.79418	0.018818	$9.6E+2$	0.41616	2.403	0.045218
11.4	0.79465	0.018496	$1.0E+3$	0.41603	2.404	0.044458
11.5	0.7951	0.018181	$1.0E+3$	0.41589	2.404	0.043716
11.6	0.79554	0.017875	$1.1E+3$	0.41576	2.405	0.042992
11.7	0.79598	0.017576	$1.1E+3$	0.41564	2.406	0.042286
11.8	0.7964	0.017284	$1.2E+3$	0.41551	2.407	0.041597
11.9	0.79681	0.017	$1.2E+3$	0.41539	2.407	0.040925
12	0.79721	0.016723	$1.3E+3$	0.41528	2.408	0.040268
12.1	0.7976	0.016452	$1.3E+3$	0.41516	2.409	0.039628
12.2	0.79799	0.016188	$1.4E+3$	0.41505	2.409	0.039002
12.3	0.79836	0.01593	$1.4E+3$	0.41494	2.41	0.03839
12.4	0.79872	0.015678	$1.5E+3$	0.41483	2.411	0.037793
12.5	0.79908	0.015432	$1.6E+3$	0.41473	2.411	0.037209
12.6	0.79943	0.015192	$1.6E+3$	0.41463	2.412	0.036639

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
12.7	0.79977	0.014957	$1.7E+3$	0.41453	2.412	0.036082
12.8	0.8001	0.014727	$1.7E+3$	0.41443	2.413	0.035537
12.9	0.80043	0.014503	$1.8E+3$	0.41434	2.413	0.035004
13	0.80074	0.014284	$1.9E+3$	0.41424	2.414	0.034483
13.1	0.80105	0.01407	$1.9E+3$	0.41415	2.415	0.033973
13.2	0.80136	0.013861	$2.0E+3$	0.41406	2.415	0.033475
13.3	0.80165	0.013656	$2.1E+3$	0.41398	2.416	0.032987
13.4	0.80194	0.013456	$2.2E+3$	0.41389	2.416	0.03251
13.5	0.80223	0.01326	$2.3E+3$	0.41381	2.417	0.032043
13.6	0.80251	0.013068	$2.3E+3$	0.41373	2.417	0.031586
13.7	0.80278	0.01288	$2.4E+3$	0.41365	2.418	0.031138
13.8	0.80304	0.012697	$2.5E+3$	0.41357	2.418	0.0307
13.9	0.80331	0.012517	$2.6E+3$	0.4135	2.418	0.030271
14	0.80356	0.012341	$2.7E+3$	0.41342	2.419	0.029851
14.1	0.80381	0.012169	$2.8E+3$	0.41335	2.419	0.029439
14.2	0.80406	0.012	$2.9E+3$	0.41328	2.42	0.029036
14.3	0.8043	0.011835	$3.0E+3$	0.41321	2.42	0.028641
14.4	0.80453	0.011673	$3.1E+3$	0.41314	2.42	0.028254
14.5	0.80476	0.011514	$3.2E+3$	0.41307	2.421	0.027875
14.6	0.80499	0.011359	$3.3E+3$	0.41301	2.421	0.027503
14.7	0.80521	0.011207	$3.4E+3$	0.41294	2.422	0.027138
14.8	0.80542	0.011057	$3.5E+3$	0.41288	2.422	0.026781
14.9	0.80564	0.010911	$3.6E+3$	0.41282	2.422	0.026431
15	0.80584	0.010768	$3.8E+3$	0.41276	2.423	0.026087
15.1	0.80605	0.010627	$3.9E+3$	0.4127	2.423	0.02575
15.2	0.80625	0.010489	$4.0E+3$	0.41264	2.423	0.025419
15.3	0.80644	0.010354	$4.1E+3$	0.41259	2.424	0.025095
15.4	0.80664	0.010221	$4.3E+3$	0.41253	2.424	0.024777
15.5	0.80683	0.010091	$4.4E+3$	0.41247	2.424	0.024465
15.6	0.80701	0.00996	$4.5E+3$	0.41242	2.425	0.024158
15.7	0.80719	0.00984	$4.7E+3$	0.41237	2.425	0.023858
15.8	0.80737	0.00972	$4.8E+3$	0.41232	2.425	0.023563

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
15.9	0.80755	0.00959	$5.0E+3$	0.41227	2.426	0.023273
16	0.80772	0.00948	$5.1E+3$	0.41222	2.426	0.022989
16.1	0.80789	0.00936	$5.3E+3$	0.41217	2.426	0.022709
16.2	0.80805	0.00925	$5.5E+3$	0.41212	2.426	0.022435
16.3	0.80822	0.00913	$5.6E+3$	0.41207	2.427	0.022166
16.4	0.80838	0.00902	$5.8E+3$	0.41203	2.427	0.021901
16.5	0.80853	0.00892	$6.0E+3$	0.41198	2.427	0.021641
16.6	0.80869	0.00881	$6.2E+3$	0.41194	2.428	0.021386
16.7	0.80884	0.00871	$6.3E+3$	0.41189	2.428	0.021135
16.8	0.80899	0.0086	$6.5E+3$	0.41185	2.428	0.020888
16.9	0.80913	0.0085	$6.7E+3$	0.41181	2.428	0.020646
17	0.80928	0.0084	$6.9E+3$	0.41176	2.429	0.020408
17.1	0.80942	0.00831	$7.1E+3$	0.41172	2.429	0.020174
17.2	0.80956	0.00821	$7.3E+3$	0.41168	2.429	0.019944
17.3	0.80969	0.00812	$7.5E+3$	0.41164	2.429	0.019718
17.4	0.80983	0.00802	$7.8E+3$	0.41161	2.43	0.019496
17.5	0.80996	0.00793	$8.0E+3$	0.41157	2.43	0.019277
17.6	0.81009	0.00784	$8.2E+3$	0.41153	2.43	0.019062
17.7	0.81022	0.00776	$8.4E+3$	0.41149	2.43	0.018851
17.8	0.81034	0.00767	$8.7E+3$	0.41146	2.43	0.018643
17.9	0.81046	0.00759	$8.9E+3$	0.41142	2.431	0.018438
18	0.81059	0.0075	$9.2E+3$	0.41139	2.431	0.018237
18.1	0.81071	0.00742	$9.4E+3$	0.41135	2.431	0.018039
18.2	0.81082	0.00734	$9.7E+3$	0.41132	2.431	0.017844
18.3	0.81094	0.00726	$9.9E+3$	0.41128	2.431	0.017653
18.4	0.81105	0.00718	$1.0E+4$	0.41125	2.432	0.017464
18.5	0.81116	0.00711	$1.0E+4$	0.41122	2.432	0.017279
18.6	0.81127	0.00703	$1.1E+4$	0.41119	2.432	0.017096
18.7	0.81138	0.00696	$1.1E+4$	0.41116	2.432	0.016916
18.8	0.81149	0.00688	$1.1E+4$	0.41113	2.432	0.016739
18.9	0.81159	0.00681	$1.2E+4$	0.4111	2.433	0.016565
19	0.8117	0.00674	$1.2E+4$	0.41107	2.433	0.016393

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
19.1	0.8118	0.00667	$1.2E+4$	0.41104	2.433	0.016225
19.2	0.8119	0.0066	$1.3E+4$	0.41101	2.433	0.016058
19.3	0.812	0.00653	$1.3E+4$	0.41098	2.433	0.015894
19.4	0.81209	0.00647	$1.3E+4$	0.41095	2.433	0.015733
19.5	0.81219	0.0064	$1.4E+4$	0.41092	2.434	0.015574
19.6	0.81228	0.00634	$1.4E+4$	0.4109	2.434	0.015418
19.7	0.81238	0.00627	$1.4E+4$	0.41087	2.434	0.015264
19.8	0.81247	0.00621	$1.5E+4$	0.41084	2.434	0.015112
19.9	0.81256	0.00615	$1.5E+4$	0.41082	2.434	0.014962
20	0.81265	0.00609	$1.5E+4$	0.41079	2.434	0.014815
20.1	0.81273	0.00603	$1.6E+4$	0.41077	2.434	0.01467
20.2	0.81282	0.00597	$1.6E+4$	0.41074	2.435	0.014526
20.3	0.8129	0.00591	$1.7E+4$	0.41072	2.435	0.014385
20.4	0.81299	0.00585	$1.7E+4$	0.41069	2.435	0.014246
20.5	0.81307	0.00579	$1.7E+4$	0.41067	2.435	0.014109
20.6	0.81315	0.00574	$1.8E+4$	0.41065	2.435	0.013974
20.7	0.81323	0.00568	$1.8E+4$	0.41062	2.435	0.013841
20.8	0.81331	0.00563	$1.9E+4$	0.4106	2.435	0.01371
20.9	0.81339	0.00558	$1.9E+4$	0.41058	2.436	0.01358
21	0.81346	0.00552	$2.0E+4$	0.41056	2.436	0.013453
21.1	0.81354	0.00547	$2.0E+4$	0.41053	2.436	0.013327
21.2	0.81361	0.00542	$2.0E+4$	0.41051	2.436	0.013203
21.3	0.81369	0.00537	$2.1E+4$	0.41049	2.436	0.013081
21.4	0.81376	0.00532	$2.1E+4$	0.41047	2.436	0.01296
21.5	0.81383	0.00527	$2.2E+4$	0.41045	2.436	0.012841
21.6	0.8139	0.00522	$2.2E+4$	0.41043	2.436	0.012724
21.7	0.81397	0.00517	$2.3E+4$	0.41041	2.437	0.012608
21.8	0.81404	0.00513	$2.4E+4$	0.41039	2.437	0.012494
21.9	0.81411	0.00508	$2.4E+4$	0.41037	2.437	0.012381
22	0.81417	0.00503	$2.5E+4$	0.41035	2.437	0.01227
22.1	0.81424	0.00499	$2.5E+4$	0.41033	2.437	0.01216
22.2	0.81431	0.00495	$2.6E+4$	0.41031	2.437	0.012052

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
22.3	0.81437	0.0049	$2.6E+4$	0.4103	2.437	0.011945
22.4	0.81443	0.00486	$2.7E+4$	0.41028	2.437	0.01184
22.5	0.81449	0.00481	$2.7E+4$	0.41026	2.437	0.011736
22.6	0.81456	0.00477	$2.8E+4$	0.41024	2.438	0.011633
22.7	0.81462	0.00473	$2.9E+4$	0.41022	2.438	0.011532
22.8	0.81468	0.00469	$2.9E+4$	0.41021	2.438	0.011432
22.9	0.81474	0.00465	$3.0E+4$	0.41019	2.438	0.011333
23	0.81479	0.00461	$3.1E+4$	0.41017	2.438	0.011236
23.1	0.81485	0.00457	$3.1E+4$	0.41016	2.438	0.01114
23.2	0.81491	0.00453	$3.2E+4$	0.41014	2.438	0.011045
23.3	0.81497	0.00449	$3.3E+4$	0.41012	2.438	0.010951
23.4	0.81502	0.00445	$3.3E+4$	0.41011	2.438	0.010859
23.5	0.81508	0.00442	$3.4E+4$	0.41009	2.438	0.010767
23.6	0.81513	0.00438	$3.5E+4$	0.41008	2.439	0.010677
23.7	0.81518	0.00434	$3.6E+4$	0.41006	2.439	0.010588
23.8	0.81524	0.00431	$3.6E+4$	0.41005	2.439	0.0105
23.9	0.81529	0.00427	$3.7E+4$	0.41003	2.439	0.010413
24	0.81534	0.00423	$3.8E+4$	0.41002	2.439	0.010327
24.1	0.81539	0.0042	$3.9E+4$	0.41	2.439	0.010242
24.2	0.81544	0.00416	$3.9E+4$	0.40999	2.439	0.010158
24.3	0.81549	0.00413	$4.0E+4$	0.40997	2.439	0.010076
24.4	0.81554	0.0041	$4.1E+4$	0.40996	2.439	0.00999
24.5	0.81559	0.00406	$4.2E+4$	0.40995	2.439	0.00991
24.6	0.81564	0.00403	$4.3E+4$	0.40993	2.439	0.00983
24.7	0.81568	0.004	$4.4E+4$	0.40992	2.44	0.00975
24.8	0.81573	0.00397	$4.4E+4$	0.4099	2.44	0.00968
24.9	0.81578	0.00393	$4.5E+4$	0.40989	2.44	0.0096
25	0.81582	0.0039	$4.6E+4$	0.40988	2.44	0.00952
25.1	0.81587	0.00387	$4.7E+4$	0.40987	2.44	0.00945
25.2	0.81591	0.00384	$4.8E+4$	0.40985	2.44	0.00937
25.3	0.81595	0.00381	$4.9E+4$	0.40984	2.44	0.0093
25.4	0.816	0.00378	$5.0E+4$	0.40983	2.44	0.00923

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
25.5	0.81604	0.00375	$5.1E+4$	0.40981	2.44	0.00916
25.6	0.81608	0.00372	$5.2E+4$	0.4098	2.44	0.00909
25.7	0.81613	0.00369	$5.3E+4$	0.40979	2.44	0.00902
25.8	0.81617	0.00367	$5.4E+4$	0.40978	2.44	0.00895
25.9	0.81621	0.00364	$5.5E+4$	0.40977	2.44	0.00888
26	0.81625	0.00361	$5.6E+4$	0.40976	2.44	0.00881
26.1	0.81629	0.00358	$5.7E+4$	0.40974	2.441	0.00874
26.2	0.81633	0.00356	$5.8E+4$	0.40973	2.441	0.00868
26.3	0.81637	0.00353	$6.0E+4$	0.40972	2.441	0.00861
26.4	0.81641	0.0035	$6.1E+4$	0.40971	2.441	0.00855
26.5	0.81644	0.00348	$6.2E+4$	0.4097	2.441	0.00848
26.6	0.81648	0.00345	$6.3E+4$	0.40969	2.441	0.00842
26.7	0.81652	0.00342	$6.4E+4$	0.40968	2.441	0.00836
26.8	0.81656	0.0034	$6.5E+4$	0.40967	2.441	0.0083
26.9	0.81659	0.00337	$6.7E+4$	0.40966	2.441	0.00823
27	0.81663	0.00335	$6.8E+4$	0.40965	2.441	0.00817
27.1	0.81666	0.00332	$6.9E+4$	0.40964	2.441	0.00811
27.2	0.8167	0.0033	$7.0E+4$	0.40963	2.441	0.00806
27.3	0.81674	0.00328	$7.2E+4$	0.40962	2.441	0.008
27.4	0.81677	0.00325	$7.3E+4$	0.40961	2.441	0.00794
27.5	0.8168	0.00323	$7.4E+4$	0.4096	2.441	0.00788
27.6	0.81684	0.00321	$7.6E+4$	0.40959	2.441	0.00783
27.7	0.81687	0.00318	$7.7E+4$	0.40958	2.442	0.00777
27.8	0.8169	0.00316	$7.8E+4$	0.40957	2.442	0.00771
27.9	0.81694	0.00314	$8.0E+4$	0.40956	2.442	0.00766
28	0.81697	0.00311	$8.1E+4$	0.40955	2.442	0.0076
28.1	0.817	0.00309	$8.3E+4$	0.40954	2.442	0.00755
28.2	0.81703	0.00307	$8.4E+4$	0.40953	2.442	0.0075
28.3	0.81707	0.00305	$8.6E+4$	0.40952	2.442	0.00745
28.4	0.8171	0.00303	$8.7E+4$	0.40951	2.442	0.00739
28.5	0.81713	0.00301	$8.9E+4$	0.4095	2.442	0.00734
28.6	0.81716	0.00299	$9.0E+4$	0.40949	2.442	0.00729

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
28.7	0.81719	0.00296	$9.2E+4$	0.40949	2.442	0.00724
28.8	0.81722	0.00294	$9.3E+4$	0.40948	2.442	0.00719
28.9	0.81725	0.00292	$9.5E+4$	0.40947	2.442	0.00714
29	0.81728	0.0029	$9.7E+4$	0.40946	2.442	0.00709
29.1	0.81731	0.00288	$9.8E+4$	0.40945	2.442	0.00704
29.2	0.81733	0.00286	$1.0E+5$	0.40944	2.442	0.007
29.3	0.81736	0.00284	$1.0E+5$	0.40944	2.442	0.00695
29.4	0.81739	0.00283	$1.0E+5$	0.40943	2.442	0.0069
29.5	0.81742	0.00281	$1.1E+5$	0.40942	2.442	0.00686
29.6	0.81745	0.00279	$1.1E+5$	0.40941	2.443	0.00681
29.7	0.81747	0.00277	$1.1E+5$	0.4094	2.443	0.00676
29.8	0.8175	0.00275	$1.1E+5$	0.4094	2.443	0.00672
29.9	0.81753	0.00273	$1.1E+5$	0.40939	2.443	0.00667
30	0.81755	0.00271	$1.1E+5$	0.40938	2.443	0.00663
30.1	0.81758	0.0027	$1.2E+5$	0.40937	2.443	0.00659
30.2	0.81761	0.00268	$1.2E+5$	0.40937	2.443	0.00654
30.3	0.81763	0.00266	$1.2E+5$	0.40936	2.443	0.0065
30.4	0.81766	0.00264	$1.2E+5$	0.40935	2.443	0.00646
30.5	0.81768	0.00263	$1.2E+5$	0.40934	2.443	0.00642
30.6	0.81771	0.00261	$1.3E+5$	0.40934	2.443	0.00637
30.7	0.81773	0.00259	$1.3E+5$	0.40933	2.443	0.00633
30.8	0.81776	0.00258	$1.3E+5$	0.40932	2.443	0.00629
30.9	0.81778	0.00256	$1.3E+5$	0.40932	2.443	0.00625
31	0.8178	0.00254	$1.3E+5$	0.40931	2.443	0.00621
31.1	0.81783	0.00253	$1.4E+5$	0.4093	2.443	0.00617
31.2	0.81785	0.00251	$1.4E+5$	0.4093	2.443	0.00613
31.3	0.81787	0.00249	$1.4E+5$	0.40929	2.443	0.00609
31.4	0.8179	0.00248	$1.4E+5$	0.40928	2.443	0.00605
31.5	0.81792	0.00246	$1.5E+5$	0.40928	2.443	0.00602
31.6	0.81794	0.00245	$1.5E+5$	0.40927	2.443	0.00598
31.7	0.81796	0.00243	$1.5E+5$	0.40926	2.443	0.00594
31.8	0.81799	0.00242	$1.5E+5$	0.40926	2.443	0.0059

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
31.9	0.81801	0.0024	$1.6E+5$	0.40925	2.443	0.00587
32	0.81803	0.00239	$1.6E+5$	0.40924	2.444	0.00583
32.1	0.81805	0.00237	$1.6E+5$	0.40924	2.444	0.00579
32.2	0.81807	0.00236	$1.6E+5$	0.40923	2.444	0.00576
32.3	0.81809	0.00234	$1.7E+5$	0.40923	2.444	0.00572
32.4	0.81812	0.00233	$1.7E+5$	0.40922	2.444	0.00569
32.5	0.81814	0.00231	$1.7E+5$	0.40921	2.444	0.00565
32.6	0.81816	0.0023	$1.7E+5$	0.40921	2.444	0.00562
32.7	0.81818	0.00229	$1.8E+5$	0.4092	2.444	0.00559
32.8	0.8182	0.00227	$1.8E+5$	0.4092	2.444	0.00555
32.9	0.81822	0.00226	$1.8E+5$	0.40919	2.444	0.00552
33	0.81824	0.00224	$1.8E+5$	0.40918	2.444	0.00548
33.1	0.81826	0.00223	$1.9E+5$	0.40918	2.444	0.00545
33.2	0.81828	0.00222	$1.9E+5$	0.40917	2.444	0.00542
33.3	0.8183	0.0022	$1.9E+5$	0.40917	2.444	0.00539
33.4	0.81832	0.00219	$2.0E+5$	0.40916	2.444	0.00535
33.5	0.81833	0.00218	$2.0E+5$	0.40916	2.444	0.00532
33.6	0.81835	0.00216	$2.0E+5$	0.40915	2.444	0.00529
33.7	0.81837	0.00215	$2.0E+5$	0.40915	2.444	0.00526
33.8	0.81839	0.00214	$2.1E+5$	0.40914	2.444	0.00523
33.9	0.81841	0.00213	$2.1E+5$	0.40914	2.444	0.0052
34	0.81843	0.00211	$2.1E+5$	0.40913	2.444	0.00517
34.1	0.81844	0.0021	$2.2E+5$	0.40913	2.444	0.00514
34.2	0.81846	0.00209	$2.2E+5$	0.40912	2.444	0.00511
34.3	0.81848	0.00208	$2.2E+5$	0.40911	2.444	0.00508
34.4	0.8185	0.00207	$2.3E+5$	0.40911	2.444	0.00505
34.5	0.81852	0.00205	$2.3E+5$	0.4091	2.444	0.00502
34.6	0.81853	0.00204	$2.3E+5$	0.4091	2.444	0.00499
34.7	0.81855	0.00203	$2.4E+5$	0.4091	2.444	0.00496
34.8	0.81857	0.00202	$2.4E+5$	0.40909	2.444	0.00493
34.9	0.81858	0.00201	$2.4E+5$	0.40909	2.444	0.00491
35	0.8186	0.002	$2.5E+5$	0.40908	2.445	0.00488

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
35.1	0.81862	0.00198	$2.5E+5$	0.40908	2.445	0.00485
35.2	0.81863	0.00197	$2.5E+5$	0.40907	2.445	0.00482
35.3	0.81865	0.00196	$2.6E+5$	0.40907	2.445	0.0048
35.4	0.81866	0.00195	$2.6E+5$	0.40906	2.445	0.00477
35.5	0.81868	0.00194	$2.6E+5$	0.40906	2.445	0.00474
35.6	0.8187	0.00193	$2.7E+5$	0.40905	2.445	0.00472
35.7	0.81871	0.00192	$2.7E+5$	0.40905	2.445	0.00469
35.8	0.81873	0.00191	$2.8E+5$	0.40904	2.445	0.00466
35.9	0.81874	0.0019	$2.8E+5$	0.40904	2.445	0.00464
36	0.81876	0.00189	$2.8E+5$	0.40904	2.445	0.00461
36.1	0.81877	0.00188	$2.9E+5$	0.40903	2.445	0.00459
36.2	0.81879	0.00187	$2.9E+5$	0.40903	2.445	0.00456
36.3	0.8188	0.00186	$3.0E+5$	0.40902	2.445	0.00454
36.4	0.81882	0.00185	$3.0E+5$	0.40902	2.445	0.00451
36.5	0.81883	0.00184	$3.0E+5$	0.40901	2.445	0.00449
36.6	0.81885	0.00183	$3.1E+5$	0.40901	2.445	0.00446
36.7	0.81886	0.00182	$3.1E+5$	0.40901	2.445	0.00444
36.8	0.81888	0.00181	$3.2E+5$	0.409	2.445	0.00441
36.9	0.81889	0.0018	$3.2E+5$	0.409	2.445	0.00439
37	0.81891	0.00179	$3.2E+5$	0.40899	2.445	0.00437
37.1	0.81892	0.00178	$3.3E+5$	0.40899	2.445	0.00434
37.2	0.81893	0.00177	$3.3E+5$	0.40899	2.445	0.00432
37.3	0.81895	0.00176	$3.4E+5$	0.40898	2.445	0.0043
37.4	0.81896	0.00175	$3.4E+5$	0.40898	2.445	0.00427
37.5	0.81897	0.00174	$3.5E+5$	0.40897	2.445	0.00425
37.6	0.81899	0.00173	$3.5E+5$	0.40897	2.445	0.00423
37.7	0.819	0.00172	$3.6E+5$	0.40897	2.445	0.00421
37.8	0.81901	0.00171	$3.6E+5$	0.40896	2.445	0.00418
37.9	0.81903	0.0017	$3.7E+5$	0.40896	2.445	0.00416
38	0.81904	0.00169	$3.7E+5$	0.40895	2.445	0.00414
38.1	0.81905	0.00168	$3.8E+5$	0.40895	2.445	0.00412
38.2	0.81907	0.00168	$3.8E+5$	0.40895	2.445	0.0041

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
38.3	0.81908	0.00167	$3.9E+5$	0.40894	2.445	0.00408
38.4	0.81909	0.00166	$3.9E+5$	0.40894	2.445	0.00406
38.5	0.8191	0.00165	$4.0E+5$	0.40894	2.445	0.00403
38.6	0.81912	0.00164	$4.0E+5$	0.40893	2.445	0.00401
38.7	0.81913	0.00163	$4.1E+5$	0.40893	2.445	0.00399
38.8	0.81914	0.00162	$4.1E+5$	0.40893	2.445	0.00397
38.9	0.81915	0.00162	$4.2E+5$	0.40892	2.445	0.00395
39	0.81916	0.00161	$4.2E+5$	0.40892	2.445	0.00393
39.1	0.81918	0.0016	$4.3E+5$	0.40892	2.445	0.00391
39.2	0.81919	0.00159	$4.3E+5$	0.40891	2.446	0.00389
39.3	0.8192	0.00158	$4.4E+5$	0.40891	2.446	0.00387
39.4	0.81921	0.00158	$4.4E+5$	0.40891	2.446	0.00385
39.5	0.81922	0.00157	$4.5E+5$	0.4089	2.446	0.00383
39.6	0.81923	0.00156	$4.6E+5$	0.4089	2.446	0.00381
39.7	0.81925	0.00155	$4.6E+5$	0.4089	2.446	0.00379
39.8	0.81926	0.00154	$4.7E+5$	0.40889	2.446	0.00378
39.9	0.81927	0.00154	$4.7E+5$	0.40889	2.446	0.00376
40	0.81928	0.00153	$4.8E+5$	0.40889	2.446	0.00374
40.1	0.81929	0.00152	$4.8E+5$	0.40888	2.446	0.00372
40.2	0.8193	0.00151	$4.9E+5$	0.40888	2.446	0.0037
40.3	0.81931	0.00151	$5.0E+5$	0.40888	2.446	0.00368
40.4	0.81932	0.0015	$5.0E+5$	0.40887	2.446	0.00366
40.5	0.81933	0.00149	$5.1E+5$	0.40887	2.446	0.00365
40.6	0.81935	0.00148	$5.2E+5$	0.40887	2.446	0.00363
40.7	0.81936	0.00148	$5.2E+5$	0.40886	2.446	0.00361
40.8	0.81937	0.00147	$5.3E+5$	0.40886	2.446	0.00359
40.9	0.81938	0.00146	$5.3E+5$	0.40886	2.446	0.00358
41	0.81939	0.00145	$5.4E+5$	0.40885	2.446	0.00356
41.1	0.8194	0.00145	$5.5E+5$	0.40885	2.446	0.00354
41.2	0.81941	0.00144	$5.5E+5$	0.40885	2.446	0.00352
41.3	0.81942	0.00143	$5.6E+5$	0.40885	2.446	0.00351
41.4	0.81943	0.00143	$5.7E+5$	0.40884	2.446	0.00349

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
41.5	0.81944	0.00142	$5.7E+5$	0.40884	2.446	0.00347
41.6	0.81945	0.00141	$5.8E+5$	0.40884	2.446	0.00346
41.7	0.81946	0.00141	$5.9E+5$	0.40883	2.446	0.00344
41.8	0.81947	0.0014	$6.0E+5$	0.40883	2.446	0.00342
41.9	0.81948	0.00139	$6.0E+5$	0.40883	2.446	0.00341
42	0.81949	0.00139	$6.1E+5$	0.40883	2.446	0.00339
42.1	0.8195	0.00138	$6.2E+5$	0.40882	2.446	0.00338
42.2	0.81951	0.00137	$6.2E+5$	0.40882	2.446	0.00336
42.3	0.81952	0.00137	$6.3E+5$	0.40882	2.446	0.00334
42.4	0.81952	0.00136	$6.4E+5$	0.40882	2.446	0.00333
42.5	0.81953	0.00135	$6.5E+5$	0.40881	2.446	0.00331
42.6	0.81954	0.00135	$6.5E+5$	0.40881	2.446	0.0033
42.7	0.81955	0.00134	$6.6E+5$	0.40881	2.446	0.00328
42.8	0.81956	0.00134	$6.7E+5$	0.40881	2.446	0.00327
42.9	0.81957	0.00133	$6.8E+5$	0.4088	2.446	0.00325
43	0.81958	0.00132	$6.9E+5$	0.4088	2.446	0.00324
43.1	0.81959	0.00132	$6.9E+5$	0.4088	2.446	0.00322
43.2	0.8196	0.00131	$7.0E+5$	0.40879	2.446	0.00321
43.3	0.81961	0.0013	$7.1E+5$	0.40879	2.446	0.00319
43.4	0.81962	0.0013	$7.2E+5$	0.40879	2.446	0.00318
43.5	0.81962	0.00129	$7.3E+5$	0.40879	2.446	0.00316
43.6	0.81963	0.00129	$7.4E+5$	0.40878	2.446	0.00315
43.7	0.81964	0.00128	$7.4E+5$	0.40878	2.446	0.00313
43.8	0.81965	0.00128	$7.5E+5$	0.40878	2.446	0.00312
43.9	0.81966	0.00127	$7.6E+5$	0.40878	2.446	0.00311
44	0.81967	0.00126	$7.7E+5$	0.40878	2.446	0.00309
44.1	0.81967	0.00126	$7.8E+5$	0.40877	2.446	0.00308
44.2	0.81968	0.00125	$7.9E+5$	0.40877	2.446	0.00306
44.3	0.81969	0.00125	$8.0E+5$	0.40877	2.446	0.00305
44.4	0.8197	0.00124	$8.0E+5$	0.40877	2.446	0.00304
44.5	0.81971	0.00124	$8.1E+5$	0.40876	2.446	0.00302
44.6	0.81972	0.00123	$8.2E+5$	0.40876	2.446	0.00301

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
44.7	0.81972	0.00122	$8.3E+5$	0.40876	2.446	0.003
44.8	0.81973	0.00122	$8.4E+5$	0.40876	2.446	0.00298
44.9	0.81974	0.00121	$8.5E+5$	0.40875	2.446	0.00297
45	0.81975	0.00121	$8.6E+5$	0.40875	2.446	0.00296
45.1	0.81975	0.0012	$8.7E+5$	0.40875	2.446	0.00294
45.2	0.81976	0.0012	$8.8E+5$	0.40875	2.446	0.00293
45.3	0.81977	0.00119	$8.9E+5$	0.40875	2.447	0.00292
45.4	0.81978	0.00119	$9.0E+5$	0.40874	2.447	0.0029
45.5	0.81979	0.00118	$9.1E+5$	0.40874	2.447	0.00289
45.6	0.81979	0.00118	$9.2E+5$	0.40874	2.447	0.00288
45.7	0.8198	0.00117	$9.3E+5$	0.40874	2.447	0.00287
45.8	0.81981	0.00117	$9.4E+5$	0.40873	2.447	0.00285
45.9	0.81982	0.00116	$9.5E+5$	0.40873	2.447	0.00284
46	0.81982	0.00116	$9.6E+5$	0.40873	2.447	0.00283
46.1	0.81983	0.00115	$9.7E+5$	0.40873	2.447	0.00282
46.2	0.81984	0.00115	$9.8E+5$	0.40873	2.447	0.0028
46.3	0.81984	0.00114	$9.9E+5$	0.40872	2.447	0.00279
46.4	0.81985	0.00114	$1.0E+6$	0.40872	2.447	0.00278
46.5	0.81986	0.00113	$1.0E+6$	0.40872	2.447	0.00277
46.6	0.81987	0.00113	$1.0E+6$	0.40872	2.447	0.00276
46.7	0.81987	0.00112	$1.0E+6$	0.40872	2.447	0.00274
46.8	0.81988	0.00112	$1.0E+6$	0.40871	2.447	0.00273
46.9	0.81989	0.00111	$1.1E+6$	0.40871	2.447	0.00272
47	0.81989	0.00111	$1.1E+6$	0.40871	2.447	0.00271
47.1	0.8199	0.0011	$1.1E+6$	0.40871	2.447	0.0027
47.2	0.81991	0.0011	$1.1E+6$	0.40871	2.447	0.00269
47.3	0.81991	0.00109	$1.1E+6$	0.4087	2.447	0.00268
47.4	0.81992	0.00109	$1.1E+6$	0.4087	2.447	0.00266
47.5	0.81993	0.00108	$1.1E+6$	0.4087	2.447	0.00265
47.6	0.81993	0.00108	$1.1E+6$	0.4087	2.447	0.00264
47.7	0.81994	0.00108	$1.2E+6$	0.4087	2.447	0.00263
47.8	0.81995	0.00107	$1.2E+6$	0.40869	2.447	0.00262

Table 5.3: Fanno Flow Standard Basic Table k=1.4 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
47.9	0.81995	0.00107	$1.2E+6$	0.40869	2.447	0.00261
48	0.81996	0.00106	$1.2E+6$	0.40869	2.447	0.0026
48.1	0.81997	0.00106	$1.2E+6$	0.40869	2.447	0.00259
48.2	0.81997	0.00105	$1.2E+6$	0.40869	2.447	0.00258
48.3	0.81998	0.00105	$1.2E+6$	0.40869	2.447	0.00257
48.4	0.81999	0.00104	$1.2E+6$	0.40868	2.447	0.00256
48.5	0.81999	0.00104	$1.3E+6$	0.40868	2.447	0.00255
48.6	0.82	0.00104	$1.3E+6$	0.40868	2.447	0.00253
48.7	0.82	0.00103	$1.3E+6$	0.40868	2.447	0.00252
48.8	0.82001	0.00103	$1.3E+6$	0.40868	2.447	0.00251
48.9	0.82002	0.00102	$1.3E+6$	0.40867	2.447	0.0025
49	0.82002	0.00102	$1.3E+6$	0.40867	2.447	0.00249
49.1	0.82003	0.00101	$1.3E+6$	0.40867	2.447	0.00248
49.2	0.82003	0.00101	$1.3E+6$	0.40867	2.447	0.00247
49.3	0.82004	0.00101	$1.4E+6$	0.40867	2.447	0.00246
49.4	0.82005	0.001	$1.4E+6$	0.40867	2.447	0.00245
49.5	0.82005	0.000999	$1.4E+6$	0.40866	2.447	0.00244
49.6	0.82006	0.000995	$1.4E+6$	0.40866	2.447	0.00243
49.7	0.82006	0.000991	$1.4E+6$	0.40866	2.447	0.00242
49.8	0.82007	0.000987	$1.4E+6$	0.40866	2.447	0.00241
49.9	0.82008	0.000983	$1.4E+6$	0.40866	2.447	0.0024
50	0.82008	0.000979	$1.5E+6$	0.40866	2.447	0.0024

5.4 Standard Fanno Flow Table for k=1.67

Table 5.4: Fanno Flow Standard Basic Table k=1.67

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.01	5980.29	115.54	56.2345	86.5499	0.01155	1.3350
0.02	1490.38	57.7672	28.1229	43.2771	0.02311	1.3348
0.03	659.36	38.5083	18.7548	28.8538	0.03466	1.3346

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.04	368.74	28.8778	14.0727	21.6429	0.04620	1.3343
0.05	234.36	23.0988	11.2649	17.3169	0.05775	1.3339
0.06	161.47	19.2454	9.3943	14.4334	0.06928	1.3334
0.07	117.58	16.4925	8.0593	12.3742	0.08081	1.3328
0.08	89.1552	14.4273	7.0589	10.8301	0.09233	1.3321
0.09	69.7064	12.8206	6.2817	9.6295	0.10385	1.3314
0.10	55.8284	11.5349	5.6607	8.6693	0.11535	1.3305
0.11	45.5877	10.4826	5.1533	7.8840	0.12684	1.3296
0.12	37.8219	9.6054	4.7310	7.2297	0.13832	1.3286
0.13	31.7978	8.8628	4.3744	6.6764	0.14978	1.3275
0.14	27.0347	8.2261	4.0692	6.2023	0.16123	1.3263
0.15	23.2065	7.6739	3.8052	5.7916	0.17266	1.3250
0.16	20.0861	7.1906	3.5747	5.4324	0.18408	1.3236
0.17	17.5113	6.7639	3.3718	5.1157	0.19548	1.3222
0.18	15.3635	6.3845	3.1919	4.8343	0.20686	1.3207
0.19	13.5547	6.0447	3.0313	4.5826	0.21821	1.3190
0.20	12.0184	5.7388	2.8871	4.3563	0.22955	1.3173
0.21	10.7036	5.4618	2.7571	4.1517	0.24087	1.3156
0.22	9.5705	5.2099	2.6392	3.9658	0.25216	1.3137
0.23	8.5879	4.9796	2.5319	3.7962	0.26342	1.3118
0.24	7.7311	4.7685	2.4339	3.6408	0.27466	1.3097
0.25	6.9800	4.5741	2.3440	3.4980	0.28588	1.3076
0.26	6.3186	4.3945	2.2614	3.3663	0.29706	1.3054
0.27	5.7335	4.2280	2.1852	3.2444	0.30822	1.3032
0.28	5.2140	4.0734	2.1147	3.1313	0.31935	1.3008
0.29	4.7510	3.9292	2.0494	3.0262	0.33045	1.2984
0.30	4.3369	3.7946	1.9886	2.9281	0.34152	1.2959
0.31	3.9654	3.6686	1.9321	2.8365	0.35255	1.2934
0.32	3.6312	3.5503	1.8794	2.7506	0.36355	1.2907
0.33	3.3296	3.4391	1.8301	2.6701	0.37452	1.2880
0.34	3.0569	3.3344	1.7839	2.5944	0.38545	1.2852
0.35	2.8097	3.2355	1.7406	2.5230	0.39635	1.2824

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.36	2.5852	3.1420	1.7000	2.4558	0.40721	1.2795
0.37	2.3807	3.0535	1.6618	2.3922	0.41803	1.2765
0.38	2.1943	2.9696	1.6258	2.3320	0.42881	1.2734
0.39	2.0239	2.8899	1.5919	2.2750	0.43956	1.2703
0.40	1.8680	2.8141	1.5599	2.2209	0.45026	1.2671
0.41	1.7251	2.7420	1.5297	2.1696	0.46092	1.2638
0.42	1.5939	2.6732	1.5011	2.1207	0.47154	1.2605
0.43	1.4733	2.6075	1.4740	2.0742	0.48212	1.2571
0.44	1.3623	2.5447	1.4484	2.0298	0.49266	1.2537
0.45	1.2601	2.4847	1.4242	1.9875	0.50315	1.2502
0.46	1.1658	2.4272	1.4011	1.9470	0.51360	1.2466
0.47	1.0787	2.3721	1.3793	1.9084	0.52401	1.2430
0.48	0.99823	2.3193	1.3585	1.8714	0.53436	1.2393
0.49	0.92379	2.2685	1.3388	1.8360	0.54468	1.2356
0.50	0.85488	2.2198	1.3201	1.8020	0.55494	1.2318
0.51	0.79104	2.1728	1.3023	1.7694	0.56516	1.2280
0.52	0.73186	2.1277	1.2853	1.7381	0.57533	1.2241
0.53	0.67696	2.0842	1.2692	1.7081	0.58545	1.2202
0.54	0.62601	2.0422	1.2538	1.6792	0.59552	1.2162
0.55	0.57870	2.0018	1.2392	1.6514	0.60554	1.2122
0.56	0.53474	1.9627	1.2253	1.6247	0.61551	1.2081
0.57	0.49390	1.9250	1.2120	1.5989	0.62543	1.2040
0.58	0.45593	1.8885	1.1994	1.5741	0.63530	1.1998
0.59	0.42062	1.8533	1.1873	1.5501	0.64512	1.1956
0.60	0.38778	1.8191	1.1759	1.5270	0.65489	1.1913
0.61	0.35723	1.7861	1.1649	1.5047	0.66460	1.1870
0.62	0.32881	1.7541	1.1545	1.4831	0.67426	1.1827
0.63	0.30237	1.7230	1.1446	1.4623	0.68387	1.1783
0.64	0.27778	1.6929	1.1352	1.4421	0.69342	1.1739
0.65	0.25490	1.6637	1.1262	1.4226	0.70292	1.1695
0.66	0.23361	1.6354	1.1176	1.4038	0.71237	1.1650
0.67	0.21383	1.6078	1.1095	1.3855	0.72176	1.1605

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
0.68	0.19543	1.5811	1.1018	1.3678	0.73110	1.1559
0.69	0.17834	1.5551	1.0944	1.3507	0.74038	1.1514
0.70	0.16246	1.5298	1.0874	1.3340	0.74961	1.1468
0.71	0.14772	1.5052	1.0808	1.3179	0.75878	1.1421
0.72	0.13405	1.4813	1.0745	1.3023	0.76789	1.1375
0.73	0.12137	1.4580	1.0685	1.2871	0.77695	1.1328
0.74	0.10962	1.4353	1.0629	1.2723	0.78596	1.1281
0.75	0.09875	1.4132	1.0576	1.2580	0.79490	1.1233
0.76	0.08870	1.3916	1.0525	1.2441	0.80379	1.1186
0.77	0.07942	1.3706	1.0478	1.2306	0.81263	1.1138
0.78	0.07087	1.3501	1.0433	1.2174	0.82140	1.1090
0.79	0.06299	1.3301	1.0391	1.2046	0.83012	1.1042
0.80	0.05575	1.3106	1.0351	1.1922	0.83878	1.0993
0.81	0.04911	1.2916	1.0314	1.1801	0.84739	1.0944
0.82	0.04303	1.2730	1.0279	1.1683	0.85594	1.0896
0.83	0.03749	1.2548	1.0247	1.1568	0.86443	1.0847
0.84	0.03244	1.2370	1.0217	1.1457	0.87286	1.0798
0.85	0.02785	1.2197	1.0189	1.1348	0.88124	1.0748
0.86	0.02371	1.2028	1.0163	1.1242	0.88955	1.0699
0.87	0.01999	1.1862	1.0139	1.1138	0.89782	1.0650
0.88	0.01665	1.1700	1.0118	1.1037	0.90602	1.0600
0.89	0.01368	1.1541	1.0098	1.0939	0.91417	1.0550
0.90	0.01106	1.1386	1.0081	1.0843	0.92225	1.0501
0.91	0.00877	1.123	1.006	1.075	0.93029	1.045
0.92	0.00678	1.109	1.005	1.066	0.93826	1.04
0.93	0.00508	1.094	1.004	1.057	0.94618	1.035
0.94	0.00365	1.08	1.003	1.048	0.95404	1.03
0.95	0.00248	1.066	1.002	1.04	0.96184	1.025
0.96	0.00156	1.052	1.001	1.031	0.96958	1.02
0.97	0.000858	1.039	1.001	1.023	0.97727	1.015
0.98	0.000374	1.026	1	1.015	0.98491	1.01
0.99	$9.15E{-}5$	1.013	1	1.008	0.99248	1.005

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
1	0	1	1	1	1	1
1.01	$8.79E{-5}$	0.98761	1	0.99259	1.007	0.99498
1.02	0.000345	0.97546	1	0.98535	1.015	0.98996
1.03	0.000761	0.96354	1.001	0.97826	1.022	0.98495
1.04	0.00133	0.95184	1.001	0.97133	1.03	0.97993
1.05	0.00203	0.94036	1.002	0.96455	1.037	0.97492
1.06	0.00287	0.9291	1.003	0.95791	1.044	0.96992
1.07	0.00384	0.91804	1.004	0.95142	1.051	0.96492
1.08	0.00492	0.90718	1.005	0.94506	1.058	0.95992
1.09	0.00611	0.89652	1.006	0.93883	1.065	0.95493
1.1	0.0074	0.88604	1.007	0.93274	1.072	0.94994
1.11	0.0088	0.87576	1.008	0.92676	1.079	0.94496
1.12	0.01028	0.86565	1.01	0.92092	1.086	0.93999
1.13	0.011849	0.85573	1.012	0.91518	1.093	0.93503
1.14	0.013497	0.84597	1.013	0.90957	1.099	0.93008
1.15	0.015221	0.83638	1.015	0.90407	1.106	0.92513
1.16	0.017016	0.82696	1.017	0.89867	1.113	0.9202
1.17	0.018875	0.81769	1.02	0.89339	1.119	0.91527
1.18	0.020797	0.80858	1.022	0.8882	1.126	0.91036
1.19	0.022775	0.79963	1.024	0.88312	1.132	0.90546
1.2	0.024807	0.79082	1.027	0.87813	1.139	0.90057
1.21	0.026888	0.78216	1.029	0.87325	1.145	0.89569
1.22	0.029015	0.77363	1.032	0.86845	1.151	0.89082
1.23	0.031186	0.76525	1.035	0.86374	1.158	0.88597
1.24	0.033396	0.75701	1.038	0.85913	1.164	0.88113
1.25	0.035642	0.74889	1.041	0.8546	1.17	0.87631
1.26	0.037923	0.74091	1.044	0.85015	1.176	0.8715
1.27	0.040234	0.73305	1.047	0.84579	1.182	0.8667
1.28	0.042575	0.72531	1.05	0.8415	1.188	0.86192
1.29	0.044941	0.7177	1.054	0.8373	1.194	0.85716
1.3	0.047332	0.7102	1.057	0.83317	1.2	0.85241
1.31	0.049744	0.70282	1.061	0.82911	1.206	0.84768

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
1.32	0.052175	0.69555	1.065	0.82513	1.212	0.84296
1.33	0.054625	0.6884	1.069	0.82122	1.218	0.83826
1.34	0.05709	0.68135	1.073	0.81738	1.223	0.83358
1.35	0.05957	0.67441	1.077	0.8136	1.229	0.82892
1.36	0.062061	0.66757	1.081	0.80989	1.235	0.82427
1.37	0.064564	0.66083	1.085	0.80625	1.24	0.81964
1.38	0.067076	0.6542	1.089	0.80266	1.246	0.81503
1.39	0.069596	0.64766	1.094	0.79914	1.251	0.81044
1.4	0.072122	0.64122	1.098	0.79568	1.257	0.80587
1.41	0.074654	0.63487	1.103	0.79228	1.262	0.80131
1.42	0.077189	0.62861	1.107	0.78894	1.268	0.79678
1.43	0.079728	0.62244	1.112	0.78565	1.273	0.79227
1.44	0.082268	0.61636	1.117	0.78242	1.278	0.78777
1.45	0.084809	0.61037	1.122	0.77924	1.283	0.7833
1.46	0.08735	0.60447	1.127	0.77611	1.288	0.77884
1.47	0.08989	0.59864	1.132	0.77303	1.294	0.77441
1.48	0.092428	0.5929	1.137	0.77001	1.299	0.76999
1.49	0.094963	0.58724	1.143	0.76703	1.304	0.7656
1.5	0.097494	0.58166	1.148	0.7641	1.309	0.76123
1.51	0.10002	0.57615	1.154	0.76122	1.314	0.75687
1.52	0.10254	0.57072	1.159	0.75839	1.319	0.75254
1.53	0.10506	0.56536	1.165	0.7556	1.323	0.74823
1.54	0.10757	0.56008	1.171	0.75285	1.328	0.74395
1.55	0.11007	0.55487	1.177	0.75015	1.333	0.73968
1.56	0.11257	0.54973	1.182	0.74749	1.338	0.73543
1.57	0.11505	0.54465	1.189	0.74487	1.343	0.73121
1.58	0.11753	0.53965	1.195	0.74229	1.347	0.72701
1.59	0.12	0.53471	1.201	0.73975	1.352	0.72283
1.6	0.12246	0.52984	1.207	0.73725	1.356	0.71867
1.61	0.12491	0.52503	1.214	0.73479	1.361	0.71453
1.62	0.12735	0.52029	1.22	0.73237	1.365	0.71042
1.63	0.12978	0.5156	1.227	0.72998	1.37	0.70633

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
1.64	0.1322	0.51098	1.233	0.72763	1.374	0.70226
1.65	0.13461	0.50642	1.24	0.72531	1.379	0.69821
1.66	0.137	0.50191	1.247	0.72303	1.383	0.69418
1.67	0.13939	0.49747	1.254	0.72078	1.387	0.69018
1.68	0.14176	0.49308	1.261	0.71857	1.392	0.6862
1.69	0.14412	0.48874	1.268	0.71638	1.396	0.68224
1.7	0.14647	0.48447	1.275	0.71423	1.4	0.6783
1.71	0.1488	0.48024	1.282	0.71211	1.404	0.67439
1.72	0.15112	0.47607	1.289	0.71002	1.408	0.6705
1.73	0.15343	0.47195	1.297	0.70797	1.412	0.66663
1.74	0.15573	0.46788	1.304	0.70594	1.417	0.66278
1.75	0.15801	0.46386	1.312	0.70394	1.421	0.65895
1.76	0.16028	0.45989	1.32	0.70197	1.425	0.65515
1.77	0.16253	0.45598	1.327	0.70002	1.429	0.65137
1.78	0.16477	0.4521	1.335	0.69811	1.432	0.64761
1.79	0.167	0.44828	1.343	0.69622	1.436	0.64388
1.8	0.16921	0.4445	1.351	0.69435	1.44	0.64016
1.81	0.17141	0.44077	1.359	0.69252	1.444	0.63647
1.82	0.17359	0.43708	1.367	0.69071	1.448	0.63281
1.83	0.17577	0.43344	1.376	0.68892	1.452	0.62916
1.84	0.17792	0.42984	1.384	0.68716	1.455	0.62553
1.85	0.18006	0.42628	1.393	0.68542	1.459	0.62193
1.86	0.18219	0.42277	1.401	0.68371	1.463	0.61835
1.87	0.1843	0.4193	1.41	0.68201	1.466	0.61479
1.88	0.1864	0.41587	1.418	0.68035	1.47	0.61126
1.89	0.18849	0.41248	1.427	0.6787	1.473	0.60774
1.9	0.19056	0.40912	1.436	0.67708	1.477	0.60425
1.91	0.19261	0.40581	1.445	0.67547	1.48	0.60078
1.92	0.19465	0.40254	1.454	0.67389	1.484	0.59733
1.93	0.19668	0.3993	1.463	0.67233	1.487	0.5939
1.94	0.19869	0.3961	1.472	0.67079	1.491	0.5905
1.95	0.20069	0.39294	1.482	0.66927	1.494	0.58711

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
1.96	0.20267	0.38981	1.491	0.66778	1.498	0.58375
1.97	0.20464	0.38672	1.501	0.6663	1.501	0.58041
1.98	0.2066	0.38367	1.51	0.66483	1.504	0.57709
1.99	0.20854	0.38065	1.52	0.66339	1.507	0.57379
2	0.21046	0.37766	1.53	0.66197	1.511	0.57051
2.01	0.21238	0.37471	1.54	0.66056	1.514	0.56726
2.02	0.21427	0.37179	1.55	0.65918	1.517	0.56402
2.03	0.21616	0.3689	1.56	0.65781	1.52	0.56081
2.04	0.21803	0.36605	1.57	0.65645	1.523	0.55761
2.05	0.21988	0.36322	1.58	0.65512	1.526	0.55444
2.06	0.22173	0.36043	1.59	0.6538	1.53	0.55129
2.07	0.22355	0.35767	1.601	0.6525	1.533	0.54816
2.08	0.22537	0.35494	1.611	0.65121	1.536	0.54504
2.09	0.22717	0.35224	1.622	0.64994	1.539	0.54195
2.1	0.22896	0.34956	1.632	0.64868	1.542	0.53888
2.11	0.23073	0.34692	1.643	0.64745	1.545	0.53583
2.12	0.23249	0.34431	1.654	0.64622	1.547	0.5328
2.13	0.23423	0.34172	1.665	0.64501	1.55	0.52979
2.14	0.23597	0.33916	1.676	0.64382	1.553	0.5268
2.15	0.23769	0.33663	1.687	0.64264	1.556	0.52383
2.16	0.23939	0.33413	1.698	0.64147	1.559	0.52088
2.17	0.24109	0.33165	1.709	0.64032	1.562	0.51795
2.18	0.24277	0.3292	1.721	0.63918	1.564	0.51504
2.19	0.24443	0.32678	1.732	0.63806	1.567	0.51214
2.2	0.24609	0.32438	1.744	0.63695	1.57	0.50927
2.21	0.24773	0.322	1.755	0.63585	1.573	0.50642
2.22	0.24936	0.31966	1.767	0.63476	1.575	0.50358
2.23	0.25097	0.31733	1.779	0.63369	1.578	0.50076
2.24	0.25258	0.31503	1.791	0.63263	1.581	0.49797
2.25	0.25417	0.31275	1.803	0.63158	1.583	0.49519
2.26	0.25574	0.3105	1.815	0.63055	1.586	0.49243
2.27	0.25731	0.30827	1.827	0.62953	1.588	0.48969

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
2.28	0.25886	0.30607	1.84	0.62852	1.591	0.48697
2.29	0.2604	0.30388	1.852	0.62752	1.594	0.48426
2.3	0.26193	0.30172	1.865	0.62653	1.596	0.48158
2.31	0.26345	0.29958	1.877	0.62555	1.599	0.47891
2.32	0.26496	0.29746	1.89	0.62458	1.601	0.47626
2.33	0.26645	0.29537	1.903	0.62363	1.604	0.47363
2.34	0.26793	0.29329	1.915	0.62269	1.606	0.47101
2.35	0.2694	0.29124	1.928	0.62175	1.608	0.46841
2.36	0.27086	0.2892	1.942	0.62083	1.611	0.46584
2.37	0.27231	0.28719	1.955	0.61992	1.613	0.46327
2.38	0.27374	0.2852	1.968	0.61901	1.615	0.46073
2.39	0.27517	0.28322	1.981	0.61812	1.618	0.4582
2.4	0.27658	0.28127	1.995	0.61724	1.62	0.45569
2.41	0.27798	0.27934	2.008	0.61636	1.622	0.4532
2.42	0.27937	0.27742	2.022	0.6155	1.625	0.45073
2.43	0.28075	0.27553	2.036	0.61465	1.627	0.44827
2.44	0.28212	0.27365	2.05	0.6138	1.629	0.44582
2.45	0.28348	0.27179	2.064	0.61297	1.631	0.4434
2.46	0.28483	0.26995	2.078	0.61214	1.634	0.44099
2.47	0.28617	0.26812	2.092	0.61132	1.636	0.4386
2.48	0.28749	0.26632	2.106	0.61051	1.638	0.43622
2.49	0.28881	0.26453	2.12	0.60971	1.64	0.43386
2.5	0.29011	0.26276	2.135	0.60892	1.642	0.43152
2.51	0.29141	0.26101	2.149	0.60814	1.644	0.42919
2.52	0.2927	0.25927	2.164	0.60736	1.646	0.42687
2.53	0.29397	0.25755	2.179	0.6066	1.649	0.42458
2.54	0.29524	0.25584	2.193	0.60584	1.651	0.4223
2.55	0.29649	0.25416	2.208	0.60509	1.653	0.42003
2.56	0.29774	0.25248	2.223	0.60435	1.655	0.41778
2.57	0.29897	0.25083	2.239	0.60361	1.657	0.41555
2.58	0.3002	0.24919	2.254	0.60288	1.659	0.41333
2.59	0.30142	0.24756	2.269	0.60216	1.661	0.41112

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
2.6	0.30262	0.24595	2.285	0.60145	1.663	0.40893
2.61	0.30382	0.24436	2.3	0.60075	1.665	0.40676
2.62	0.30501	0.24278	2.316	0.60005	1.667	0.4046
2.63	0.30619	0.24121	2.332	0.59936	1.668	0.40245
2.64	0.30736	0.23966	2.348	0.59868	1.67	0.40032
2.65	0.30852	0.23813	2.363	0.598	1.672	0.39821
2.66	0.30967	0.2366	2.38	0.59733	1.674	0.3961
2.67	0.31081	0.2351	2.396	0.59667	1.676	0.39402
2.68	0.31195	0.2336	2.412	0.59601	1.678	0.39194
2.69	0.31307	0.23212	2.428	0.59536	1.68	0.38988
2.7	0.31419	0.23065	2.445	0.59472	1.681	0.38784
2.71	0.31529	0.2292	2.462	0.59408	1.683	0.38581
2.72	0.31639	0.22776	2.478	0.59345	1.685	0.38379
2.73	0.31748	0.22633	2.495	0.59283	1.687	0.38179
2.74	0.31857	0.22492	2.512	0.59221	1.689	0.3798
2.75	0.31964	0.22352	2.529	0.5916	1.69	0.37782
2.76	0.3207	0.22213	2.546	0.59099	1.692	0.37586
2.77	0.32176	0.22075	2.563	0.59039	1.694	0.37391
2.78	0.32281	0.21939	2.581	0.5898	1.696	0.37197
2.79	0.32385	0.21803	2.598	0.58921	1.697	0.37004
2.8	0.32488	0.21669	2.616	0.58863	1.699	0.36813
2.81	0.32591	0.21536	2.633	0.58805	1.701	0.36624
2.82	0.32693	0.21405	2.651	0.58748	1.702	0.36435
2.83	0.32794	0.21274	2.669	0.58691	1.704	0.36248
2.84	0.32894	0.21145	2.687	0.58635	1.705	0.36062
2.85	0.32993	0.21017	2.705	0.5858	1.707	0.35877
2.86	0.33092	0.2089	2.723	0.58525	1.709	0.35694
2.87	0.3319	0.20764	2.742	0.5847	1.71	0.35511
2.88	0.33287	0.20639	2.76	0.58416	1.712	0.3533
2.89	0.33383	0.20515	2.779	0.58363	1.713	0.35151
2.9	0.33479	0.20392	2.797	0.5831	1.715	0.34972
2.91	0.33574	0.2027	2.816	0.58257	1.717	0.34794

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
2.92	0.33668	0.2015	2.835	0.58206	1.718	0.34618
2.93	0.33762	0.2003	2.854	0.58154	1.72	0.34443
2.94	0.33855	0.19912	2.873	0.58103	1.721	0.34269
2.95	0.33947	0.19794	2.892	0.58053	1.723	0.34097
2.96	0.34038	0.19677	2.912	0.58003	1.724	0.33925
2.97	0.34129	0.19562	2.931	0.57953	1.726	0.33755
2.98	0.34219	0.19447	2.951	0.57904	1.727	0.33585
2.99	0.34308	0.19334	2.971	0.57855	1.728	0.33417
3	0.34397	0.19221	2.99	0.57807	1.73	0.3325
3.01	0.34485	0.19109	3.01	0.57759	1.731	0.33084
3.02	0.34572	0.18999	3.03	0.57712	1.733	0.3292
3.03	0.34659	0.18889	3.05	0.57665	1.734	0.32756
3.04	0.34745	0.1878	3.071	0.57619	1.736	0.32593
3.05	0.34831	0.18672	3.091	0.57572	1.737	0.32432
3.06	0.34916	0.18565	3.112	0.57527	1.738	0.32271
3.07	0.35	0.18458	3.132	0.57482	1.74	0.32112
3.08	0.35083	0.18353	3.153	0.57437	1.741	0.31954
3.09	0.35166	0.18249	3.174	0.57392	1.742	0.31796
3.1	0.35249	0.18145	3.195	0.57348	1.744	0.3164
3.11	0.3533	0.18042	3.216	0.57305	1.745	0.31485
3.12	0.35411	0.1794	3.237	0.57261	1.746	0.3133
3.13	0.35492	0.17839	3.258	0.57218	1.748	0.31177
3.14	0.35572	0.17739	3.28	0.57176	1.749	0.31025
3.15	0.35651	0.17639	3.301	0.57134	1.75	0.30874
3.16	0.3573	0.17541	3.323	0.57092	1.752	0.30724
3.17	0.35808	0.17443	3.345	0.57051	1.753	0.30575
3.18	0.35886	0.17346	3.367	0.5701	1.754	0.30426
3.19	0.35963	0.1725	3.389	0.56969	1.755	0.30279
3.2	0.36039	0.17154	3.411	0.56929	1.757	0.30133
3.21	0.36115	0.17059	3.433	0.56889	1.758	0.29987
3.22	0.36191	0.16965	3.456	0.56849	1.759	0.29843
3.23	0.36266	0.16872	3.478	0.5681	1.76	0.297

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
3.24	0.3634	0.1678	3.501	0.56771	1.761	0.29557
3.25	0.36414	0.16688	3.524	0.56732	1.763	0.29415
3.26	0.36487	0.16597	3.547	0.56694	1.764	0.29275
3.27	0.3656	0.16507	3.57	0.56656	1.765	0.29135
3.28	0.36632	0.16417	3.593	0.56618	1.766	0.28996
3.29	0.36704	0.16328	3.616	0.56581	1.767	0.28858
3.3	0.36775	0.1624	3.639	0.56544	1.769	0.28721
3.31	0.36845	0.16153	3.663	0.56507	1.77	0.28585
3.32	0.36915	0.16066	3.687	0.56471	1.771	0.2845
3.33	0.36985	0.1598	3.71	0.56435	1.772	0.28315
3.34	0.37054	0.15894	3.734	0.56399	1.773	0.28182
3.35	0.37123	0.15809	3.758	0.56363	1.774	0.28049
3.36	0.37191	0.15725	3.783	0.56328	1.775	0.27917
3.37	0.37259	0.15642	3.807	0.56293	1.776	0.27786
3.38	0.37326	0.15559	3.831	0.56259	1.778	0.27656
3.39	0.37393	0.15477	3.856	0.56224	1.779	0.27527
3.4	0.37459	0.15395	3.88	0.5619	1.78	0.27398
3.41	0.37525	0.15314	3.905	0.56156	1.781	0.2727
3.42	0.3759	0.15234	3.93	0.56123	1.782	0.27144
3.43	0.37655	0.15154	3.955	0.5609	1.783	0.27018
3.44	0.37719	0.15075	3.98	0.56057	1.784	0.26892
3.45	0.37783	0.14996	4.006	0.56024	1.785	0.26768
3.46	0.37847	0.14918	4.031	0.55992	1.786	0.26644
3.47	0.3791	0.14841	4.057	0.55959	1.787	0.26521
3.48	0.37973	0.14764	4.082	0.55928	1.788	0.26399
3.49	0.38035	0.14688	4.108	0.55896	1.789	0.26278
3.5	0.38097	0.14613	4.134	0.55865	1.79	0.26157
3.51	0.38158	0.14538	4.16	0.55833	1.791	0.26037
3.52	0.38219	0.14463	4.187	0.55802	1.792	0.25918
3.53	0.3828	0.14389	4.213	0.55772	1.793	0.258
3.54	0.3834	0.14316	4.24	0.55741	1.794	0.25683
3.55	0.38399	0.14243	4.266	0.55711	1.795	0.25566

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
3.56	0.38459	0.14171	4.293	0.55681	1.796	0.2545
3.57	0.38517	0.14099	4.32	0.55652	1.797	0.25334
3.58	0.38576	0.14028	4.347	0.55622	1.798	0.2522
3.59	0.38634	0.13957	4.374	0.55593	1.799	0.25106
3.6	0.38692	0.13887	4.401	0.55564	1.8	0.24993
3.61	0.38749	0.13817	4.429	0.55535	1.801	0.2488
3.62	0.38806	0.13748	4.456	0.55507	1.802	0.24768
3.63	0.38862	0.13679	4.484	0.55478	1.803	0.24657
3.64	0.38918	0.13611	4.512	0.5545	1.803	0.24547
3.65	0.38974	0.13543	4.54	0.55422	1.804	0.24437
3.66	0.3903	0.13476	4.568	0.55394	1.805	0.24328
3.67	0.39085	0.1341	4.596	0.55367	1.806	0.2422
3.68	0.39139	0.13343	4.625	0.5534	1.807	0.24112
3.69	0.39193	0.13278	4.653	0.55313	1.808	0.24005
3.7	0.39247	0.13212	4.682	0.55286	1.809	0.23898
3.71	0.39301	0.13148	4.711	0.55259	1.81	0.23793
3.72	0.39354	0.13083	4.74	0.55233	1.811	0.23688
3.73	0.39407	0.13019	4.769	0.55207	1.811	0.23583
3.74	0.39459	0.12956	4.798	0.5518	1.812	0.23479
3.75	0.39511	0.12893	4.827	0.55155	1.813	0.23376
3.76	0.39563	0.12831	4.857	0.55129	1.814	0.23274
3.77	0.39615	0.12768	4.887	0.55103	1.815	0.23172
3.78	0.39666	0.12707	4.916	0.55078	1.816	0.2307
3.79	0.39716	0.12646	4.946	0.55053	1.816	0.2297
3.8	0.39767	0.12585	4.976	0.55028	1.817	0.2287
3.81	0.39817	0.12524	5.007	0.55004	1.818	0.2277
3.82	0.39867	0.12465	5.037	0.54979	1.819	0.22671
3.83	0.39916	0.12405	5.067	0.54955	1.82	0.22573
3.84	0.39965	0.12346	5.098	0.5493	1.82	0.22476
3.85	0.40014	0.12287	5.129	0.54906	1.821	0.22379
3.86	0.40063	0.12229	5.16	0.54883	1.822	0.22282
3.87	0.40111	0.12171	5.191	0.54859	1.823	0.22186

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
3.88	0.40159	0.12114	5.222	0.54836	1.824	0.22091
3.89	0.40206	0.12057	5.254	0.54812	1.824	0.21996
3.9	0.40253	0.12	5.285	0.54789	1.825	0.21902
3.91	0.403	0.11944	5.317	0.54766	1.826	0.21808
3.92	0.40347	0.11888	5.349	0.54743	1.827	0.21715
3.93	0.40393	0.11832	5.38	0.54721	1.827	0.21623
3.94	0.40439	0.11777	5.413	0.54698	1.828	0.21531
3.95	0.40485	0.11722	5.445	0.54676	1.829	0.21439
3.96	0.4053	0.11668	5.477	0.54654	1.83	0.21349
3.97	0.40575	0.11614	5.51	0.54632	1.83	0.21258
3.98	0.4062	0.1156	5.542	0.5461	1.831	0.21169
3.99	0.40665	0.11507	5.575	0.54588	1.832	0.21079
4	0.40709	0.11454	5.608	0.54567	1.833	0.20991
4.01	0.40753	0.11401	5.641	0.54545	1.833	0.20902
4.02	0.40797	0.11349	5.675	0.54524	1.834	0.20815
4.03	0.4084	0.11297	5.708	0.54503	1.835	0.20728
4.04	0.40883	0.11246	5.742	0.54482	1.835	0.20641
4.05	0.40926	0.11194	5.776	0.54461	1.836	0.20555
4.06	0.40969	0.11144	5.809	0.54441	1.837	0.20469
4.07	0.41011	0.11093	5.843	0.5442	1.838	0.20384
4.08	0.41053	0.11043	5.878	0.544	1.838	0.20299
4.09	0.41095	0.10993	5.912	0.5438	1.839	0.20215
4.1	0.41137	0.10943	5.947	0.5436	1.84	0.20132
4.11	0.41178	0.10894	5.981	0.5434	1.84	0.20048
4.12	0.41219	0.10845	6.016	0.5432	1.841	0.19966
4.13	0.4126	0.10797	6.051	0.543	1.842	0.19884
4.14	0.413	0.10749	6.086	0.54281	1.842	0.19802
4.15	0.41341	0.10701	6.121	0.54261	1.843	0.19721
4.16	0.41381	0.10653	6.157	0.54242	1.844	0.1964
4.17	0.4142	0.10606	6.192	0.54223	1.844	0.1956
4.18	0.4146	0.10559	6.228	0.54204	1.845	0.1948
4.19	0.41499	0.10512	6.264	0.54185	1.846	0.194

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
4.2	0.41538	0.10466	6.3	0.54166	1.846	0.19322
4.21	0.41577	0.1042	6.336	0.54148	1.847	0.19243
4.22	0.41616	0.10374	6.373	0.54129	1.847	0.19165
4.23	0.41654	0.10328	6.409	0.54111	1.848	0.19087
4.24	0.41692	0.10283	6.446	0.54093	1.849	0.1901
4.25	0.4173	0.10238	6.483	0.54075	1.849	0.18934
4.26	0.41768	0.10194	6.52	0.54057	1.85	0.18857
4.27	0.41805	0.10149	6.557	0.54039	1.851	0.18782
4.28	0.41842	0.10105	6.594	0.54021	1.851	0.18706
4.29	0.41879	0.10062	6.632	0.54003	1.852	0.18631
4.3	0.41916	0.10018	6.669	0.53986	1.852	0.18557
4.31	0.41952	0.099748	6.707	0.53969	1.853	0.18483
4.32	0.41989	0.099319	6.745	0.53951	1.854	0.18409
4.33	0.42025	0.098892	6.783	0.53934	1.854	0.18336
4.34	0.42061	0.098468	6.821	0.53917	1.855	0.18263
4.35	0.42096	0.098046	6.86	0.539	1.855	0.1819
4.36	0.42132	0.097628	6.898	0.53883	1.856	0.18118
4.37	0.42167	0.097212	6.937	0.53867	1.856	0.18047
4.38	0.42202	0.096798	6.976	0.5385	1.857	0.17976
4.39	0.42237	0.096387	7.015	0.53833	1.858	0.17905
4.4	0.42271	0.095979	7.054	0.53817	1.858	0.17834
4.41	0.42306	0.095573	7.094	0.53801	1.859	0.17764
4.42	0.4234	0.095169	7.133	0.53785	1.859	0.17695
4.43	0.42374	0.094769	7.173	0.53769	1.86	0.17625
4.44	0.42408	0.09437	7.213	0.53753	1.86	0.17556
4.45	0.42441	0.093974	7.253	0.53737	1.861	0.17488
4.46	0.42475	0.093581	7.293	0.53721	1.861	0.1742
4.47	0.42508	0.09319	7.334	0.53705	1.862	0.17352
4.48	0.42541	0.092801	7.374	0.5369	1.863	0.17285
4.49	0.42573	0.092415	7.415	0.53674	1.863	0.17218
4.5	0.42606	0.092031	7.456	0.53659	1.864	0.17151
4.51	0.42638	0.091649	7.497	0.53644	1.864	0.17085

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
4.52	0.42671	0.09127	7.538	0.53628	1.865	0.17019
4.53	0.42703	0.090893	7.579	0.53613	1.865	0.16953
4.54	0.42735	0.090518	7.621	0.53598	1.866	0.16888
4.55	0.42766	0.090146	7.663	0.53583	1.866	0.16823
4.56	0.42798	0.089776	7.705	0.53569	1.867	0.16759
4.57	0.42829	0.089408	7.747	0.53554	1.867	0.16695
4.58	0.4286	0.089042	7.789	0.53539	1.868	0.16631
4.59	0.42891	0.088679	7.831	0.53525	1.868	0.16568
4.6	0.42922	0.088317	7.874	0.5351	1.869	0.16505
4.61	0.42952	0.087958	7.917	0.53496	1.869	0.16442
4.62	0.42983	0.087601	7.96	0.53482	1.87	0.1638
4.63	0.43013	0.087246	8.003	0.53468	1.87	0.16318
4.64	0.43043	0.086893	8.046	0.53454	1.871	0.16256
4.65	0.43073	0.086543	8.089	0.5344	1.871	0.16195
4.66	0.43103	0.086194	8.133	0.53426	1.872	0.16133
4.67	0.43132	0.085848	8.177	0.53412	1.872	0.16073
4.68	0.43162	0.085503	8.221	0.53398	1.873	0.16012
4.69	0.43191	0.085161	8.265	0.53385	1.873	0.15952
4.7	0.4322	0.08482	8.309	0.53371	1.874	0.15893
4.71	0.43249	0.084482	8.354	0.53357	1.874	0.15833
4.72	0.43277	0.084145	8.398	0.53344	1.875	0.15774
4.73	0.43306	0.083811	8.443	0.53331	1.875	0.15715
4.74	0.43334	0.083478	8.488	0.53318	1.876	0.15657
4.75	0.43363	0.083148	8.533	0.53304	1.876	0.15599
4.76	0.43391	0.082819	8.579	0.53291	1.876	0.15541
4.77	0.43419	0.082492	8.624	0.53278	1.877	0.15483
4.78	0.43446	0.082167	8.67	0.53265	1.877	0.15426
4.79	0.43474	0.081844	8.716	0.53253	1.878	0.15369
4.8	0.43501	0.081523	8.762	0.5324	1.878	0.15312
4.81	0.43529	0.081204	8.808	0.53227	1.879	0.15256
4.82	0.43556	0.080886	8.854	0.53215	1.879	0.152
4.83	0.43583	0.080571	8.901	0.53202	1.88	0.15144

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
4.84	0.4361	0.080257	8.948	0.5319	1.88	0.15089
4.85	0.43636	0.079945	8.995	0.53177	1.881	0.15034
4.86	0.43663	0.079635	9.042	0.53165	1.881	0.14979
4.87	0.43689	0.079326	9.089	0.53153	1.881	0.14924
4.88	0.43716	0.07902	9.137	0.5314	1.882	0.1487
4.89	0.43742	0.078715	9.184	0.53128	1.882	0.14816
4.9	0.43768	0.078412	9.232	0.53116	1.883	0.14762
4.91	0.43794	0.07811	9.28	0.53104	1.883	0.14709
4.92	0.43819	0.07781	9.328	0.53092	1.884	0.14656
4.93	0.43845	0.077512	9.377	0.53081	1.884	0.14603
4.94	0.4387	0.077216	9.425	0.53069	1.884	0.1455
4.95	0.43895	0.076921	9.474	0.53057	1.885	0.14498
4.96	0.43921	0.076628	9.523	0.53046	1.885	0.14446
4.97	0.43946	0.076336	9.572	0.53034	1.886	0.14394
4.98	0.4397	0.076047	9.621	0.53023	1.886	0.14342
4.99	0.43995	0.075758	9.671	0.53011	1.886	0.14291
5	0.4402	0.075472	9.721	0.53	1.887	0.1424
5.02	0.44069	0.074903	9.821	0.52977	1.888	0.14139
5.04	0.44117	0.074341	9.921	0.52955	1.888	0.14039
5.06	0.44165	0.073785	10.02	0.52933	1.889	0.13939
5.08	0.44212	0.073236	10.12	0.52911	1.89	0.13841
5.1	0.44259	0.072692	10.23	0.5289	1.891	0.13744
5.12	0.44305	0.072154	10.33	0.52869	1.891	0.13648
5.14	0.44351	0.071622	10.44	0.52848	1.892	0.13553
5.16	0.44396	0.071096	10.54	0.52827	1.893	0.13458
5.18	0.44441	0.070575	10.65	0.52807	1.894	0.13365
5.2	0.44485	0.07006	10.75	0.52786	1.894	0.13272
5.22	0.44529	0.069551	10.86	0.52766	1.895	0.13181
5.24	0.44572	0.069047	10.97	0.52746	1.896	0.1309
5.26	0.44615	0.068549	11.08	0.52727	1.897	0.13001
5.28	0.44658	0.068055	11.19	0.52707	1.897	0.12912
5.3	0.447	0.067567	11.3	0.52688	1.898	0.12824

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
5.32	0.44741	0.067084	11.41	0.52669	1.899	0.12737
5.34	0.44783	0.066607	11.52	0.5265	1.899	0.12651
5.36	0.44824	0.066134	11.63	0.52632	1.9	0.12565
5.38	0.44864	0.065666	11.75	0.52613	1.901	0.12481
5.4	0.44904	0.065203	11.86	0.52595	1.901	0.12397
5.42	0.44943	0.064745	11.98	0.52577	1.902	0.12314
5.44	0.44983	0.064291	12.09	0.52559	1.903	0.12232
5.46	0.45021	0.063843	12.21	0.52542	1.903	0.12151
5.48	0.4506	0.063398	12.33	0.52524	1.904	0.1207
5.5	0.45098	0.062959	12.45	0.52507	1.905	0.11991
5.52	0.45135	0.062524	12.57	0.5249	1.905	0.11912
5.54	0.45173	0.062093	12.69	0.52473	1.906	0.11833
5.56	0.4521	0.061667	12.81	0.52456	1.906	0.11756
5.58	0.45246	0.061245	12.93	0.5244	1.907	0.11679
5.6	0.45282	0.060827	13.05	0.52423	1.908	0.11603
5.62	0.45318	0.060414	13.18	0.52407	1.908	0.11528
5.64	0.45354	0.060004	13.3	0.52391	1.909	0.11453
5.66	0.45389	0.059599	13.43	0.52375	1.909	0.11379
5.68	0.45423	0.059198	13.55	0.5236	1.91	0.11306
5.7	0.45458	0.058801	13.68	0.52344	1.91	0.11233
5.72	0.45492	0.058407	13.81	0.52329	1.911	0.11162
5.74	0.45526	0.058018	13.93	0.52314	1.912	0.1109
5.76	0.45559	0.057632	14.06	0.52299	1.912	0.1102
5.78	0.45592	0.05725	14.19	0.52284	1.913	0.1095
5.8	0.45625	0.056872	14.32	0.52269	1.913	0.10881
5.82	0.45658	0.056498	14.46	0.52254	1.914	0.10812
5.84	0.4569	0.056127	14.59	0.5224	1.914	0.10744
5.86	0.45722	0.05576	14.72	0.52225	1.915	0.10677
5.88	0.45753	0.055396	14.86	0.52211	1.915	0.1061
5.9	0.45785	0.055036	14.99	0.52197	1.916	0.10544
5.92	0.45816	0.05468	15.13	0.52183	1.916	0.10478
5.94	0.45846	0.054326	15.26	0.5217	1.917	0.10413

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
5.96	0.45877	0.053976	15.4	0.52156	1.917	0.10349
5.98	0.45907	0.05363	15.54	0.52142	1.918	0.10285
6	0.45937	0.053287	15.68	0.52129	1.918	0.10222
6.02	0.45966	0.052947	15.82	0.52116	1.919	0.10159
6.04	0.45996	0.05261	15.96	0.52103	1.919	0.10097
6.06	0.46025	0.052276	16.11	0.5209	1.92	0.10036
6.08	0.46053	0.051946	16.25	0.52077	1.92	0.099748
6.1	0.46082	0.051618	16.39	0.52064	1.921	0.099143
6.12	0.4611	0.051294	16.54	0.52051	1.921	0.098544
6.14	0.46138	0.050972	16.68	0.52039	1.922	0.09795
6.16	0.46166	0.050654	16.83	0.52027	1.922	0.097362
6.18	0.46193	0.050338	16.98	0.52014	1.923	0.096778
6.2	0.46221	0.050026	17.13	0.52002	1.923	0.0962
6.22	0.46248	0.049716	17.28	0.5199	1.923	0.095626
6.24	0.46274	0.049409	17.43	0.51978	1.924	0.095058
6.26	0.46301	0.049105	17.58	0.51966	1.924	0.094494
6.28	0.46327	0.048804	17.73	0.51955	1.925	0.093936
6.3	0.46353	0.048505	17.88	0.51943	1.925	0.093382
6.32	0.46379	0.04821	18.04	0.51932	1.926	0.092833
6.34	0.46405	0.047916	18.19	0.5192	1.926	0.092288
6.36	0.4643	0.047626	18.35	0.51909	1.926	0.091749
6.38	0.46455	0.047338	18.51	0.51898	1.927	0.091214
6.4	0.4648	0.047053	18.66	0.51887	1.927	0.090683
6.42	0.46505	0.04677	18.82	0.51876	1.928	0.090157
6.44	0.46529	0.046489	18.98	0.51865	1.928	0.089635
6.46	0.46553	0.046212	19.14	0.51854	1.928	0.089118
6.48	0.46578	0.045936	19.3	0.51844	1.929	0.088606
6.5	0.46601	0.045663	19.47	0.51833	1.929	0.088097
6.52	0.46625	0.045393	19.63	0.51822	1.93	0.087593
6.54	0.46648	0.045125	19.79	0.51812	1.93	0.087093
6.56	0.46672	0.044859	19.96	0.51802	1.93	0.086597
6.58	0.46695	0.044595	20.13	0.51792	1.931	0.086105

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
6.6	0.46718	0.044334	20.29	0.51782	1.931	0.085618
6.62	0.4674	0.044075	20.46	0.51771	1.932	0.085134
6.64	0.46763	0.043818	20.63	0.51762	1.932	0.084654
6.66	0.46785	0.043564	20.8	0.51752	1.932	0.084179
6.68	0.46807	0.043312	20.97	0.51742	1.933	0.083707
6.7	0.46829	0.043061	21.15	0.51732	1.933	0.083239
6.72	0.46851	0.042813	21.32	0.51723	1.933	0.082775
6.74	0.46872	0.042568	21.49	0.51713	1.934	0.082315
6.76	0.46893	0.042324	21.67	0.51704	1.934	0.081858
6.78	0.46915	0.042082	21.84	0.51694	1.934	0.081405
6.8	0.46936	0.041842	22.02	0.51685	1.935	0.080956
6.82	0.46956	0.041605	22.2	0.51676	1.935	0.080511
6.84	0.46977	0.041369	22.38	0.51667	1.935	0.080069
6.86	0.46997	0.041135	22.56	0.51658	1.936	0.07963
6.88	0.47018	0.040904	22.74	0.51649	1.936	0.079195
6.9	0.47038	0.040674	22.92	0.5164	1.936	0.078764
6.92	0.47058	0.040446	23.11	0.51631	1.937	0.078336
6.94	0.47078	0.04022	23.29	0.51623	1.937	0.077912
6.96	0.47097	0.039996	23.47	0.51614	1.937	0.07749
6.98	0.47117	0.039774	23.66	0.51605	1.938	0.077073
7	0.47136	0.039553	23.85	0.51597	1.938	0.076658
7.02	0.47155	0.039335	24.04	0.51588	1.938	0.076247
7.04	0.47174	0.039118	24.23	0.5158	1.939	0.075839
7.06	0.47193	0.038903	24.42	0.51572	1.939	0.075434
7.08	0.47212	0.038689	24.61	0.51564	1.939	0.075032
7.1	0.4723	0.038478	24.8	0.51555	1.94	0.074634
7.12	0.47249	0.038268	24.99	0.51547	1.94	0.074238
7.14	0.47267	0.03806	25.19	0.51539	1.94	0.073846
7.16	0.47285	0.037853	25.38	0.51531	1.941	0.073457
7.18	0.47303	0.037648	25.58	0.51523	1.941	0.07307
7.2	0.47321	0.037445	25.78	0.51516	1.941	0.072687
7.22	0.47339	0.037244	25.98	0.51508	1.941	0.072307

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
7.24	0.47356	0.037044	26.18	0.515	1.942	0.071929
7.26	0.47374	0.036845	26.38	0.51493	1.942	0.071555
7.28	0.47391	0.036649	26.58	0.51485	1.942	0.071183
7.3	0.47408	0.036453	26.78	0.51477	1.943	0.070814
7.32	0.47425	0.03626	26.99	0.5147	1.943	0.070448
7.34	0.47442	0.036068	27.19	0.51463	1.943	0.070085
7.36	0.47459	0.035877	27.4	0.51455	1.943	0.069724
7.38	0.47475	0.035688	27.61	0.51448	1.944	0.069367
7.4	0.47492	0.0355	27.81	0.51441	1.944	0.069012
7.42	0.47508	0.035314	28.02	0.51434	1.944	0.068659
7.44	0.47524	0.035129	28.23	0.51427	1.945	0.068309
7.46	0.47541	0.034946	28.45	0.51419	1.945	0.067962
7.48	0.47557	0.034764	28.66	0.51412	1.945	0.067618
7.5	0.47572	0.034583	28.87	0.51406	1.945	0.067276
7.52	0.47588	0.034404	29.09	0.51399	1.946	0.066936
7.54	0.47604	0.034227	29.3	0.51392	1.946	0.066599
7.56	0.47619	0.03405	29.52	0.51385	1.946	0.066265
7.58	0.47635	0.033875	29.74	0.51378	1.946	0.065933
7.6	0.4765	0.033701	29.96	0.51372	1.947	0.065603
7.62	0.47665	0.033529	30.18	0.51365	1.947	0.065276
7.64	0.4768	0.033358	30.4	0.51358	1.947	0.064951
7.66	0.47695	0.033188	30.62	0.51352	1.947	0.064629
7.68	0.4771	0.03302	30.85	0.51346	1.948	0.064309
7.7	0.47725	0.032853	31.07	0.51339	1.948	0.063991
7.72	0.47739	0.032687	31.3	0.51333	1.948	0.063676
7.74	0.47754	0.032522	31.52	0.51326	1.948	0.063363
7.76	0.47768	0.032359	31.75	0.5132	1.949	0.063052
7.78	0.47782	0.032196	31.98	0.51314	1.949	0.062744
7.8	0.47797	0.032035	32.21	0.51308	1.949	0.062437
7.82	0.47811	0.031875	32.44	0.51302	1.949	0.062133
7.84	0.47825	0.031717	32.68	0.51296	1.949	0.061831
7.86	0.47839	0.031559	32.91	0.51289	1.95	0.061532

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
7.88	0.47852	0.031403	33.15	0.51283	1.95	0.061234
7.9	0.47866	0.031248	33.38	0.51278	1.95	0.060938
7.92	0.4788	0.031094	33.62	0.51272	1.95	0.060645
7.94	0.47893	0.030941	33.86	0.51266	1.951	0.060354
7.96	0.47906	0.030789	34.1	0.5126	1.951	0.060064
7.98	0.4792	0.030638	34.34	0.51254	1.951	0.059777
8	0.47933	0.030489	34.58	0.51248	1.951	0.059492
8.02	0.47946	0.03034	34.83	0.51243	1.951	0.059209
8.04	0.47959	0.030193	35.07	0.51237	1.952	0.058928
8.06	0.47972	0.030046	35.32	0.51232	1.952	0.058648
8.08	0.47985	0.029901	35.56	0.51226	1.952	0.058371
8.1	0.47997	0.029757	35.81	0.5122	1.952	0.058096
8.12	0.4801	0.029614	36.06	0.51215	1.953	0.057822
8.14	0.48023	0.029471	36.31	0.5121	1.953	0.057551
8.16	0.48035	0.02933	36.56	0.51204	1.953	0.057281
8.18	0.48047	0.02919	36.81	0.51199	1.953	0.057013
8.2	0.4806	0.029051	37.07	0.51193	1.953	0.056747
8.22	0.48072	0.028913	37.32	0.51188	1.954	0.056483
8.24	0.48084	0.028775	37.58	0.51183	1.954	0.056221
8.26	0.48096	0.028639	37.84	0.51178	1.954	0.05596
8.28	0.48108	0.028504	38.1	0.51172	1.954	0.055701
8.3	0.4812	0.028369	38.36	0.51167	1.954	0.055444
8.32	0.48132	0.028236	38.62	0.51162	1.955	0.055189
8.34	0.48143	0.028104	38.88	0.51157	1.955	0.054936
8.36	0.48155	0.027972	39.14	0.51152	1.955	0.054684
8.38	0.48166	0.027841	39.41	0.51147	1.955	0.054434
8.4	0.48178	0.027712	39.67	0.51142	1.955	0.054185
8.42	0.48189	0.027583	39.94	0.51137	1.956	0.053939
8.44	0.482	0.027455	40.21	0.51132	1.956	0.053694
8.46	0.48212	0.027328	40.48	0.51128	1.956	0.05345
8.48	0.48223	0.027202	40.75	0.51123	1.956	0.053208
8.5	0.48234	0.027076	41.02	0.51118	1.956	0.052968

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
8.52	0.48245	0.026952	41.3	0.51113	1.956	0.05273
8.54	0.48256	0.026828	41.57	0.51108	1.957	0.052493
8.56	0.48267	0.026705	41.85	0.51104	1.957	0.052257
8.58	0.48277	0.026584	42.12	0.51099	1.957	0.052023
8.6	0.48288	0.026462	42.4	0.51094	1.957	0.051791
8.62	0.48299	0.026342	42.68	0.5109	1.957	0.05156
8.64	0.48309	0.026223	42.96	0.51085	1.958	0.051331
8.66	0.4832	0.026104	43.25	0.51081	1.958	0.051103
8.68	0.4833	0.025986	43.53	0.51076	1.958	0.050877
8.7	0.4834	0.025869	43.81	0.51072	1.958	0.050652
8.72	0.48351	0.025753	44.1	0.51067	1.958	0.050429
8.74	0.48361	0.025637	44.39	0.51063	1.958	0.050207
8.76	0.48371	0.025522	44.68	0.51059	1.959	0.049987
8.78	0.48381	0.025409	44.97	0.51054	1.959	0.049768
8.8	0.48391	0.025295	45.26	0.5105	1.959	0.04955
8.82	0.48401	0.025183	45.55	0.51046	1.959	0.049334
8.84	0.48411	0.025071	45.84	0.51041	1.959	0.049119
8.86	0.48421	0.02496	46.14	0.51037	1.959	0.048906
8.88	0.48431	0.02485	46.43	0.51033	1.96	0.048694
8.9	0.4844	0.02474	46.73	0.51029	1.96	0.048483
8.92	0.4845	0.024632	47.03	0.51025	1.96	0.048274
8.94	0.48459	0.024523	47.33	0.5102	1.96	0.048066
8.96	0.48469	0.024416	47.63	0.51016	1.96	0.047859
8.98	0.48478	0.024309	47.94	0.51012	1.96	0.047654
9	0.48488	0.024203	48.24	0.51008	1.96	0.04745
9.02	0.48497	0.024098	48.55	0.51004	1.961	0.047247
9.04	0.48506	0.023993	48.85	0.51	1.961	0.047046
9.06	0.48515	0.023889	49.16	0.50996	1.961	0.046845
9.08	0.48525	0.023786	49.47	0.50992	1.961	0.046646
9.1	0.48534	0.023683	49.78	0.50988	1.961	0.046449
9.12	0.48543	0.023582	50.09	0.50985	1.961	0.046252
9.14	0.48552	0.02348	50.41	0.50981	1.962	0.046057

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
9.16	0.48561	0.02338	50.72	0.50977	1.962	0.045863
9.18	0.48569	0.02328	51.04	0.50973	1.962	0.04567
9.2	0.48578	0.02318	51.35	0.50969	1.962	0.045479
9.22	0.48587	0.023081	51.67	0.50965	1.962	0.045288
9.24	0.48596	0.022983	51.99	0.50962	1.962	0.045099
9.26	0.48604	0.022886	52.31	0.50958	1.962	0.044911
9.28	0.48613	0.022789	52.64	0.50954	1.963	0.044724
9.3	0.48621	0.022693	52.96	0.50951	1.963	0.044538
9.32	0.4863	0.022597	53.29	0.50947	1.963	0.044354
9.34	0.48638	0.022502	53.61	0.50943	1.963	0.04417
9.36	0.48647	0.022407	53.94	0.5094	1.963	0.043988
9.38	0.48655	0.022313	54.27	0.50936	1.963	0.043807
9.4	0.48663	0.02222	54.6	0.50933	1.963	0.043627
9.42	0.48671	0.022127	54.94	0.50929	1.964	0.043448
9.44	0.48679	0.022035	55.27	0.50926	1.964	0.04327
9.46	0.48688	0.021944	55.6	0.50922	1.964	0.043093
9.48	0.48696	0.021853	55.94	0.50919	1.964	0.042917
9.5	0.48704	0.021762	56.28	0.50915	1.964	0.042742
9.52	0.48712	0.021672	56.62	0.50912	1.964	0.042569
9.54	0.4872	0.021583	56.96	0.50908	1.964	0.042396
9.56	0.48727	0.021494	57.3	0.50905	1.964	0.042224
9.58	0.48735	0.021406	57.64	0.50902	1.965	0.042054
9.6	0.48743	0.021318	57.99	0.50898	1.965	0.041884
9.62	0.48751	0.021231	58.34	0.50895	1.965	0.041716
9.64	0.48758	0.021145	58.68	0.50892	1.965	0.041548
9.66	0.48766	0.021058	59.03	0.50888	1.965	0.041382
9.68	0.48774	0.020973	59.38	0.50885	1.965	0.041216
9.7	0.48781	0.020888	59.73	0.50882	1.965	0.041051
9.72	0.48789	0.020803	60.09	0.50879	1.965	0.040888
9.74	0.48796	0.020719	60.44	0.50876	1.966	0.040725
9.76	0.48803	0.020636	60.8	0.50872	1.966	0.040564
9.78	0.48811	0.020553	61.16	0.50869	1.966	0.040403

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
9.8	0.48818	0.02047	61.51	0.50866	1.966	0.040243
9.82	0.48825	0.020388	61.88	0.50863	1.966	0.040084
9.84	0.48833	0.020306	62.24	0.5086	1.966	0.039926
9.86	0.4884	0.020225	62.6	0.50857	1.966	0.039769
9.88	0.48847	0.020145	62.96	0.50854	1.966	0.039613
9.9	0.48854	0.020065	63.33	0.50851	1.967	0.039458
9.92	0.48861	0.019985	63.7	0.50848	1.967	0.039304
9.94	0.48868	0.019906	64.07	0.50845	1.967	0.03915
9.96	0.48875	0.019827	64.44	0.50842	1.967	0.038998
9.98	0.48882	0.019749	64.81	0.50839	1.967	0.038846
10	0.48889	0.019671	65.18	0.50836	1.967	0.038696
10.1	0.48923	0.019289	67.07	0.50821	1.968	0.037955
10.2	0.48956	0.018918	69	0.50807	1.968	0.037235
10.3	0.48988	0.018557	70.96	0.50793	1.969	0.036535
10.4	0.49019	0.018207	72.96	0.5078	1.969	0.035855
10.5	0.49049	0.017866	75	0.50767	1.97	0.035193
10.6	0.49078	0.017535	77.07	0.50755	1.97	0.034549
10.7	0.49107	0.017213	79.19	0.50742	1.971	0.033923
10.8	0.49135	0.0169	81.34	0.5073	1.971	0.033313
10.9	0.49162	0.016595	83.54	0.50719	1.972	0.03272
11	0.49188	0.016298	85.77	0.50708	1.972	0.032142
11.1	0.49214	0.016009	88.04	0.50697	1.973	0.031579
11.2	0.49239	0.015728	90.36	0.50686	1.973	0.03103
11.3	0.49263	0.015454	92.71	0.50676	1.973	0.030496
11.4	0.49287	0.015187	95.1	0.50666	1.974	0.029975
11.5	0.4931	0.014927	97.54	0.50656	1.974	0.029468
11.6	0.49332	0.014674	$1.0E+2$	0.50646	1.974	0.028973
11.7	0.49354	0.014427	$1.0E+2$	0.50637	1.975	0.02849
11.8	0.49376	0.014186	$1.1E+2$	0.50628	1.975	0.028019
11.9	0.49397	0.013951	$1.1E+2$	0.50619	1.976	0.02756
12	0.49417	0.013721	$1.1E+2$	0.5061	1.976	0.027112
12.1	0.49437	0.013498	$1.1E+2$	0.50602	1.976	0.026675

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
12.2	0.49456	0.01328	$1.2E+2$	0.50593	1.977	0.026248
12.3	0.49475	0.013067	$1.2E+2$	0.50585	1.977	0.025831
12.4	0.49494	0.012859	$1.2E+2$	0.50577	1.977	0.025424
12.5	0.49512	0.012656	$1.2E+2$	0.5057	1.977	0.025026
12.6	0.4953	0.012458	$1.3E+2$	0.50562	1.978	0.024638
12.7	0.49547	0.012264	$1.3E+2$	0.50555	1.978	0.024259
12.8	0.49564	0.012075	$1.3E+2$	0.50548	1.978	0.023888
12.9	0.4958	0.01189	$1.4E+2$	0.50541	1.979	0.023525
13	0.49596	0.011709	$1.4E+2$	0.50534	1.979	0.023171
13.1	0.49612	0.011533	$1.4E+2$	0.50527	1.979	0.022825
13.2	0.49627	0.01136	$1.5E+2$	0.50521	1.979	0.022486
13.3	0.49642	0.011191	$1.5E+2$	0.50514	1.98	0.022155
13.4	0.49657	0.011026	$1.5E+2$	0.50508	1.98	0.021831
13.5	0.49671	0.010865	$1.6E+2$	0.50502	1.98	0.021514
13.6	0.49685	0.010707	$1.6E+2$	0.50496	1.98	0.021203
13.7	0.49699	0.010552	$1.6E+2$	0.5049	1.981	0.0209
13.8	0.49713	0.010401	$1.7E+2$	0.50485	1.981	0.020603
13.9	0.49726	0.010253	$1.7E+2$	0.50479	1.981	0.020312
14	0.49739	0.010108	$1.7E+2$	0.50474	1.981	0.020027
14.1	0.49751	0.00997	$1.8E+2$	0.50468	1.981	0.019748
14.2	0.49764	0.00983	$1.8E+2$	0.50463	1.982	0.019475
14.3	0.49776	0.00969	$1.8E+2$	0.50458	1.982	0.019207
14.4	0.49788	0.00956	$1.9E+2$	0.50453	1.982	0.018945
14.5	0.49799	0.00943	$1.9E+2$	0.50448	1.982	0.018689
14.6	0.49811	0.0093	$2.0E+2$	0.50443	1.982	0.018437
14.7	0.49822	0.00917	$2.0E+2$	0.50438	1.983	0.01819
14.8	0.49833	0.00905	$2.0E+2$	0.50434	1.983	0.017949
14.9	0.49843	0.00893	$2.1E+2$	0.50429	1.983	0.017712
15	0.49854	0.00881	$2.1E+2$	0.50425	1.983	0.01748
15.1	0.49864	0.0087	$2.2E+2$	0.5042	1.983	0.017252
15.2	0.49874	0.00859	$2.2E+2$	0.50416	1.983	0.017028
15.3	0.49884	0.00847	$2.2E+2$	0.50412	1.984	0.016809

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
15.4	0.49894	0.00836	$2.3E+2$	0.50408	1.984	0.016594
15.5	0.49904	0.00826	$2.3E+2$	0.50404	1.984	0.016384
15.6	0.49913	0.00815	$2.4E+2$	0.504	1.984	0.016177
15.7	0.49922	0.00805	$2.4E+2$	0.50396	1.984	0.015974
15.8	0.49931	0.00795	$2.5E+2$	0.50392	1.984	0.015775
15.9	0.4994	0.00785	$2.5E+2$	0.50388	1.985	0.015579
16	0.49949	0.00775	$2.6E+2$	0.50385	1.985	0.015387
16.1	0.49957	0.00766	$2.6E+2$	0.50381	1.985	0.015199
16.2	0.49965	0.00756	$2.7E+2$	0.50378	1.985	0.015014
16.3	0.49974	0.00747	$2.7E+2$	0.50374	1.985	0.014832
16.4	0.49982	0.00738	$2.8E+2$	0.50371	1.985	0.014654
16.5	0.4999	0.00729	$2.8E+2$	0.50367	1.985	0.014479
16.6	0.49997	0.00721	$2.9E+2$	0.50364	1.986	0.014307
16.7	0.50005	0.00712	$2.9E+2$	0.50361	1.986	0.014138
16.8	0.50013	0.00704	$3.0E+2$	0.50358	1.986	0.013972
16.9	0.5002	0.00695	$3.0E+2$	0.50355	1.986	0.013809
17	0.50027	0.00687	$3.1E+2$	0.50352	1.986	0.013648
17.1	0.50034	0.00679	$3.1E+2$	0.50349	1.986	0.013491
17.2	0.50041	0.00671	$3.2E+2$	0.50346	1.986	0.013336
17.3	0.50048	0.00664	$3.2E+2$	0.50343	1.986	0.013184
17.4	0.50055	0.00656	$3.3E+2$	0.5034	1.986	0.013034
17.5	0.50062	0.00649	$3.3E+2$	0.50337	1.987	0.012887
17.6	0.50068	0.00641	$3.4E+2$	0.50334	1.987	0.012742
17.7	0.50075	0.00634	$3.4E+2$	0.50332	1.987	0.0126
17.8	0.50081	0.00627	$3.5E+2$	0.50329	1.987	0.01246
17.9	0.50087	0.0062	$3.6E+2$	0.50326	1.987	0.012323
18	0.50093	0.00613	$3.6E+2$	0.50324	1.987	0.012187
18.1	0.50099	0.00607	$3.7E+2$	0.50321	1.987	0.012054
18.2	0.50105	0.006	$3.7E+2$	0.50319	1.987	0.011923
18.3	0.50111	0.00593	$3.8E+2$	0.50316	1.987	0.011795
18.4	0.50117	0.00587	$3.9E+2$	0.50314	1.988	0.011668
18.5	0.50122	0.00581	$3.9E+2$	0.50312	1.988	0.011543

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
18.6	0.50128	0.00575	$4.0E+2$	0.50309	1.988	0.01142
18.7	0.50133	0.00568	$4.1E+2$	0.50307	1.988	0.0113
18.8	0.50139	0.00562	$4.1E+2$	0.50305	1.988	0.011181
18.9	0.50144	0.00557	$4.2E+2$	0.50302	1.988	0.011064
19	0.50149	0.00551	$4.2E+2$	0.503	1.988	0.010948
19.1	0.50154	0.00545	$4.3E+2$	0.50298	1.988	0.010835
19.2	0.50159	0.00539	$4.4E+2$	0.50296	1.988	0.010723
19.3	0.50164	0.00534	$4.4E+2$	0.50294	1.988	0.010613
19.4	0.50169	0.00528	$4.5E+2$	0.50292	1.988	0.010505
19.5	0.50174	0.00523	$4.6E+2$	0.5029	1.988	0.010399
19.6	0.50179	0.00518	$4.7E+2$	0.50288	1.989	0.010293
19.7	0.50183	0.00512	$4.7E+2$	0.50286	1.989	0.01019
19.8	0.50188	0.00507	$4.8E+2$	0.50284	1.989	0.010088
19.9	0.50192	0.00502	$4.9E+2$	0.50282	1.989	0.00999
20	0.50197	0.00497	$4.9E+2$	0.5028	1.989	0.00989
20.1	0.50201	0.00492	$5.0E+2$	0.50278	1.989	0.00979
20.2	0.50206	0.00487	$5.1E+2$	0.50276	1.989	0.0097
20.3	0.5021	0.00483	$5.2E+2$	0.50275	1.989	0.0096
20.4	0.50214	0.00478	$5.2E+2$	0.50273	1.989	0.00951
20.5	0.50218	0.00473	$5.3E+2$	0.50271	1.989	0.00942
20.6	0.50222	0.00469	$5.4E+2$	0.50269	1.989	0.00933
20.7	0.50226	0.00464	$5.5E+2$	0.50268	1.989	0.00924
20.8	0.5023	0.0046	$5.5E+2$	0.50266	1.989	0.00915
20.9	0.50234	0.00455	$5.6E+2$	0.50264	1.989	0.00906
21	0.50238	0.00451	$5.7E+2$	0.50263	1.99	0.00898
21.1	0.50242	0.00447	$5.8E+2$	0.50261	1.99	0.00889
21.2	0.50246	0.00443	$5.9E+2$	0.5026	1.99	0.00881
21.3	0.50249	0.00439	$6.0E+2$	0.50258	1.99	0.00873
21.4	0.50253	0.00434	$6.0E+2$	0.50257	1.99	0.00865
21.5	0.50256	0.0043	$6.1E+2$	0.50255	1.99	0.00857
21.6	0.5026	0.00427	$6.2E+2$	0.50254	1.99	0.00849
21.7	0.50263	0.00423	$6.3E+2$	0.50252	1.99	0.00841

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
21.8	0.50267	0.00419	$6.4E+2$	0.50251	1.99	0.00833
21.9	0.5027	0.00415	$6.5E+2$	0.50249	1.99	0.00826
22	0.50274	0.00411	$6.5E+2$	0.50248	1.99	0.00818
22.1	0.50277	0.00407	$6.6E+2$	0.50246	1.99	0.00811
22.2	0.5028	0.00404	$6.7E+2$	0.50245	1.99	0.00804
22.3	0.50283	0.004	$6.8E+2$	0.50244	1.99	0.00797
22.4	0.50287	0.00397	$6.9E+2$	0.50242	1.99	0.0079
22.5	0.5029	0.00393	$7.0E+2$	0.50241	1.99	0.00783
22.6	0.50293	0.0039	$7.1E+2$	0.5024	1.99	0.00776
22.7	0.50296	0.00386	$7.2E+2$	0.50238	1.991	0.00769
22.8	0.50299	0.00383	$7.3E+2$	0.50237	1.991	0.00762
22.9	0.50302	0.0038	$7.4E+2$	0.50236	1.991	0.00756
23	0.50305	0.00376	$7.5E+2$	0.50235	1.991	0.00749
23.1	0.50308	0.00373	$7.6E+2$	0.50233	1.991	0.00743
23.2	0.50311	0.0037	$7.7E+2$	0.50232	1.991	0.00736
23.3	0.50313	0.00367	$7.8E+2$	0.50231	1.991	0.0073
23.4	0.50316	0.00364	$7.9E+2$	0.5023	1.991	0.00724
23.5	0.50319	0.00361	$8.0E+2$	0.50229	1.991	0.00718
23.6	0.50322	0.00357	$8.1E+2$	0.50228	1.991	0.00712
23.7	0.50324	0.00354	$8.2E+2$	0.50226	1.991	0.00706
23.8	0.50327	0.00351	$8.3E+2$	0.50225	1.991	0.007
23.9	0.5033	0.00349	$8.4E+2$	0.50224	1.991	0.00694
24	0.50332	0.00346	$8.5E+2$	0.50223	1.991	0.00688
24.1	0.50335	0.00343	$8.6E+2$	0.50222	1.991	0.00683
24.2	0.50337	0.0034	$8.7E+2$	0.50221	1.991	0.00677
24.3	0.5034	0.00337	$8.8E+2$	0.5022	1.991	0.00671
24.4	0.50342	0.00334	$8.9E+2$	0.50219	1.991	0.00666
24.5	0.50345	0.00332	$9.0E+2$	0.50218	1.991	0.00661
24.6	0.50347	0.00329	$9.1E+2$	0.50217	1.991	0.00655
24.7	0.50349	0.00326	$9.2E+2$	0.50216	1.991	0.0065
24.8	0.50352	0.00324	$9.3E+2$	0.50215	1.991	0.00645
24.9	0.50354	0.00321	$9.5E+2$	0.50214	1.991	0.0064

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
25	0.50356	0.00319	$9.6E+2$	0.50213	1.992	0.00635
25.1	0.50359	0.00316	$9.7E+2$	0.50212	1.992	0.0063
25.2	0.50361	0.00314	$9.8E+2$	0.50211	1.992	0.00625
25.3	0.50363	0.00311	$9.9E+2$	0.5021	1.992	0.0062
25.4	0.50365	0.00309	$1.0E+3$	0.50209	1.992	0.00615
25.5	0.50367	0.00306	$1.0E+3$	0.50208	1.992	0.0061
25.6	0.5037	0.00304	$1.0E+3$	0.50208	1.992	0.00605
25.7	0.50372	0.00302	$1.0E+3$	0.50207	1.992	0.00601
25.8	0.50374	0.00299	$1.1E+3$	0.50206	1.992	0.00596
25.9	0.50376	0.00297	$1.1E+3$	0.50205	1.992	0.00591
26	0.50378	0.00295	$1.1E+3$	0.50204	1.992	0.00587
26.1	0.5038	0.00292	$1.1E+3$	0.50203	1.992	0.00582
26.2	0.50382	0.0029	$1.1E+3$	0.50202	1.992	0.00578
26.3	0.50384	0.00288	$1.1E+3$	0.50202	1.992	0.00574
26.4	0.50386	0.00286	$1.1E+3$	0.50201	1.992	0.00569
26.5	0.50388	0.00284	$1.1E+3$	0.502	1.992	0.00565
26.6	0.5039	0.00282	$1.1E+3$	0.50199	1.992	0.00561
26.7	0.50391	0.00279	$1.2E+3$	0.50198	1.992	0.00557
26.8	0.50393	0.00277	$1.2E+3$	0.50198	1.992	0.00553
26.9	0.50395	0.00275	$1.2E+3$	0.50197	1.992	0.00548
27	0.50397	0.00273	$1.2E+3$	0.50196	1.992	0.00544
27.1	0.50399	0.00271	$1.2E+3$	0.50195	1.992	0.0054
27.2	0.50401	0.00269	$1.2E+3$	0.50195	1.992	0.00536
27.3	0.50402	0.00267	$1.2E+3$	0.50194	1.992	0.00533
27.4	0.50404	0.00265	$1.3E+3$	0.50193	1.992	0.00529
27.5	0.50406	0.00263	$1.3E+3$	0.50192	1.992	0.00525
27.6	0.50407	0.00262	$1.3E+3$	0.50192	1.992	0.00521
27.7	0.50409	0.0026	$1.3E+3$	0.50191	1.992	0.00517
27.8	0.50411	0.00258	$1.3E+3$	0.5019	1.992	0.00514
27.9	0.50412	0.00256	$1.3E+3$	0.5019	1.992	0.0051
28	0.50414	0.00254	$1.3E+3$	0.50189	1.992	0.00506
28.1	0.50416	0.00252	$1.4E+3$	0.50188	1.993	0.00503

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
28.2	0.50417	0.00251	$1.4E+3$	0.50187	1.993	0.00499
28.3	0.50419	0.00249	$1.4E+3$	0.50187	1.993	0.00496
28.4	0.5042	0.00247	$1.4E+3$	0.50186	1.993	0.00492
28.5	0.50422	0.00245	$1.4E+3$	0.50186	1.993	0.00489
28.6	0.50423	0.00244	$1.4E+3$	0.50185	1.993	0.00485
28.7	0.50425	0.00242	$1.4E+3$	0.50184	1.993	0.00482
28.8	0.50426	0.0024	$1.5E+3$	0.50184	1.993	0.00479
28.9	0.50428	0.00239	$1.5E+3$	0.50183	1.993	0.00475
29	0.50429	0.00237	$1.5E+3$	0.50182	1.993	0.00472
29.1	0.50431	0.00235	$1.5E+3$	0.50182	1.993	0.00469
29.2	0.50432	0.00234	$1.5E+3$	0.50181	1.993	0.00466
29.3	0.50434	0.00232	$1.5E+3$	0.50181	1.993	0.00463
29.4	0.50435	0.00231	$1.5E+3$	0.5018	1.993	0.00459
29.5	0.50437	0.00229	$1.6E+3$	0.50179	1.993	0.00456
29.6	0.50438	0.00227	$1.6E+3$	0.50179	1.993	0.00453
29.7	0.50439	0.00226	$1.6E+3$	0.50178	1.993	0.0045
29.8	0.50441	0.00224	$1.6E+3$	0.50178	1.993	0.00447
29.9	0.50442	0.00223	$1.6E+3$	0.50177	1.993	0.00444
30	0.50443	0.00221	$1.6E+3$	0.50177	1.993	0.00441
30.1	0.50445	0.0022	$1.7E+3$	0.50176	1.993	0.00438
30.2	0.50446	0.00219	$1.7E+3$	0.50175	1.993	0.00436
30.3	0.50447	0.00217	$1.7E+3$	0.50175	1.993	0.00433
30.4	0.50448	0.00216	$1.7E+3$	0.50174	1.993	0.0043
30.5	0.5045	0.00214	$1.7E+3$	0.50174	1.993	0.00427
30.6	0.50451	0.00213	$1.7E+3$	0.50173	1.993	0.00424
30.7	0.50452	0.00211	$1.8E+3$	0.50173	1.993	0.00421
30.8	0.50453	0.0021	$1.8E+3$	0.50172	1.993	0.00419
30.9	0.50455	0.00209	$1.8E+3$	0.50172	1.993	0.00416
31	0.50456	0.00207	$1.8E+3$	0.50171	1.993	0.00413
31.1	0.50457	0.00206	$1.8E+3$	0.50171	1.993	0.00411
31.2	0.50458	0.00205	$1.8E+3$	0.5017	1.993	0.00408
31.3	0.50459	0.00203	$1.9E+3$	0.5017	1.993	0.00406

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
31.4	0.50461	0.00202	$1.9E+3$	0.50169	1.993	0.00403
31.5	0.50462	0.00201	$1.9E+3$	0.50169	1.993	0.004
31.6	0.50463	0.002	$1.9E+3$	0.50168	1.993	0.00398
31.7	0.50464	0.00198	$1.9E+3$	0.50168	1.993	0.00395
31.8	0.50465	0.00197	$2.0E+3$	0.50167	1.993	0.00393
31.9	0.50466	0.00196	$2.0E+3$	0.50167	1.993	0.0039
32	0.50467	0.00195	$2.0E+3$	0.50167	1.993	0.00388
32.1	0.50468	0.00193	$2.0E+3$	0.50166	1.993	0.00386
32.2	0.50469	0.00192	$2.0E+3$	0.50166	1.993	0.00383
32.3	0.5047	0.00191	$2.0E+3$	0.50165	1.993	0.00381
32.4	0.50472	0.0019	$2.1E+3$	0.50165	1.993	0.00379
32.5	0.50473	0.00189	$2.1E+3$	0.50164	1.993	0.00376
32.6	0.50474	0.00188	$2.1E+3$	0.50164	1.993	0.00374
32.7	0.50475	0.00186	$2.1E+3$	0.50163	1.993	0.00372
32.8	0.50476	0.00185	$2.1E+3$	0.50163	1.994	0.00369
32.9	0.50477	0.00184	$2.2E+3$	0.50163	1.994	0.00367
33	0.50478	0.00183	$2.2E+3$	0.50162	1.994	0.00365
33.1	0.50479	0.00182	$2.2E+3$	0.50162	1.994	0.00363
33.2	0.5048	0.00181	$2.2E+3$	0.50161	1.994	0.00361
33.3	0.50481	0.0018	$2.2E+3$	0.50161	1.994	0.00358
33.4	0.50482	0.00179	$2.3E+3$	0.50161	1.994	0.00356
33.5	0.50482	0.00178	$2.3E+3$	0.5016	1.994	0.00354
33.6	0.50483	0.00177	$2.3E+3$	0.5016	1.994	0.00352
33.7	0.50484	0.00176	$2.3E+3$	0.50159	1.994	0.0035
33.8	0.50485	0.00175	$2.3E+3$	0.50159	1.994	0.00348
33.9	0.50486	0.00173	$2.4E+3$	0.50159	1.994	0.00346
34	0.50487	0.00172	$2.4E+3$	0.50158	1.994	0.00344
34.1	0.50488	0.00171	$2.4E+3$	0.50158	1.994	0.00342
34.2	0.50489	0.0017	$2.4E+3$	0.50157	1.994	0.0034
34.3	0.5049	0.00169	$2.4E+3$	0.50157	1.994	0.00338
34.4	0.50491	0.00168	$2.5E+3$	0.50157	1.994	0.00336
34.5	0.50492	0.00168	$2.5E+3$	0.50156	1.994	0.00334

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
34.6	0.50492	0.00167	$2.5E+3$	0.50156	1.994	0.00332
34.7	0.50493	0.00166	$2.5E+3$	0.50156	1.994	0.0033
34.8	0.50494	0.00165	$2.6E+3$	0.50155	1.994	0.00328
34.9	0.50495	0.00164	$2.6E+3$	0.50155	1.994	0.00326
35	0.50496	0.00163	$2.6E+3$	0.50155	1.994	0.00325
35.1	0.50497	0.00162	$2.6E+3$	0.50154	1.994	0.00323
35.2	0.50497	0.00161	$2.6E+3$	0.50154	1.994	0.00321
35.3	0.50498	0.0016	$2.7E+3$	0.50154	1.994	0.00319
35.4	0.50499	0.00159	$2.7E+3$	0.50153	1.994	0.00317
35.5	0.505	0.00158	$2.7E+3$	0.50153	1.994	0.00315
35.6	0.50501	0.00157	$2.7E+3$	0.50153	1.994	0.00314
35.7	0.50501	0.00156	$2.8E+3$	0.50152	1.994	0.00312
35.8	0.50502	0.00156	$2.8E+3$	0.50152	1.994	0.0031
35.9	0.50503	0.00155	$2.8E+3$	0.50152	1.994	0.00308
36	0.50504	0.00154	$2.8E+3$	0.50151	1.994	0.00307
36.1	0.50505	0.00153	$2.9E+3$	0.50151	1.994	0.00305
36.2	0.50505	0.00152	$2.9E+3$	0.50151	1.994	0.00303
36.3	0.50506	0.00151	$2.9E+3$	0.5015	1.994	0.00302
36.4	0.50507	0.0015	$2.9E+3$	0.5015	1.994	0.003
36.5	0.50507	0.0015	$2.9E+3$	0.5015	1.994	0.00298
36.6	0.50508	0.00149	$3.0E+3$	0.50149	1.994	0.00297
36.7	0.50509	0.00148	$3.0E+3$	0.50149	1.994	0.00295
36.8	0.5051	0.00147	$3.0E+3$	0.50149	1.994	0.00294
36.9	0.5051	0.00146	$3.0E+3$	0.50148	1.994	0.00292
37	0.50511	0.00146	$3.1E+3$	0.50148	1.994	0.0029
37.1	0.50512	0.00145	$3.1E+3$	0.50148	1.994	0.00289
37.2	0.50512	0.00144	$3.1E+3$	0.50148	1.994	0.00287
37.3	0.50513	0.00143	$3.1E+3$	0.50147	1.994	0.00286
37.4	0.50514	0.00143	$3.2E+3$	0.50147	1.994	0.00284
37.5	0.50515	0.00142	$3.2E+3$	0.50147	1.994	0.00283
37.6	0.50515	0.00141	$3.2E+3$	0.50146	1.994	0.00281
37.7	0.50516	0.0014	$3.2E+3$	0.50146	1.994	0.0028

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
37.8	0.50517	0.0014	$3.3E+3$	0.50146	1.994	0.00278
37.9	0.50517	0.00139	$3.3E+3$	0.50146	1.994	0.00277
38	0.50518	0.00138	$3.3E+3$	0.50145	1.994	0.00275
38.1	0.50518	0.00137	$3.3E+3$	0.50145	1.994	0.00274
38.2	0.50519	0.00137	$3.4E+3$	0.50145	1.994	0.00273
38.3	0.5052	0.00136	$3.4E+3$	0.50144	1.994	0.00271
38.4	0.5052	0.00135	$3.4E+3$	0.50144	1.994	0.0027
38.5	0.50521	0.00135	$3.5E+3$	0.50144	1.994	0.00268
38.6	0.50522	0.00134	$3.5E+3$	0.50144	1.994	0.00267
38.7	0.50522	0.00133	$3.5E+3$	0.50143	1.994	0.00266
38.8	0.50523	0.00132	$3.5E+3$	0.50143	1.994	0.00264
38.9	0.50523	0.00132	$3.6E+3$	0.50143	1.994	0.00263
39	0.50524	0.00131	$3.6E+3$	0.50143	1.994	0.00261
39.1	0.50525	0.0013	$3.6E+3$	0.50142	1.994	0.0026
39.2	0.50525	0.0013	$3.6E+3$	0.50142	1.994	0.00259
39.3	0.50526	0.00129	$3.7E+3$	0.50142	1.994	0.00258
39.4	0.50526	0.00128	$3.7E+3$	0.50142	1.994	0.00256
39.5	0.50527	0.00128	$3.7E+3$	0.50141	1.994	0.00255
39.6	0.50528	0.00127	$3.8E+3$	0.50141	1.994	0.00254
39.7	0.50528	0.00127	$3.8E+3$	0.50141	1.994	0.00252
39.8	0.50529	0.00126	$3.8E+3$	0.50141	1.994	0.00251
39.9	0.50529	0.00125	$3.8E+3$	0.5014	1.994	0.0025
40	0.5053	0.00125	$3.9E+3$	0.5014	1.994	0.00249
40.1	0.5053	0.00124	$3.9E+3$	0.5014	1.994	0.00247
40.2	0.50531	0.00123	$3.9E+3$	0.5014	1.994	0.00246
40.3	0.50532	0.00123	$4.0E+3$	0.5014	1.994	0.00245
40.4	0.50532	0.00122	$4.0E+3$	0.50139	1.994	0.00244
40.5	0.50533	0.00122	$4.0E+3$	0.50139	1.994	0.00243
40.6	0.50533	0.00121	$4.0E+3$	0.50139	1.994	0.00241
40.7	0.50534	0.0012	$4.1E+3$	0.50139	1.994	0.0024
40.8	0.50534	0.0012	$4.1E+3$	0.50138	1.994	0.00239
40.9	0.50535	0.00119	$4.1E+3$	0.50138	1.994	0.00238

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
41	0.50535	0.00119	$4.2E+3$	0.50138	1.994	0.00237
41.1	0.50536	0.00118	$4.2E+3$	0.50138	1.995	0.00235
41.2	0.50536	0.00118	$4.2E+3$	0.50138	1.995	0.00234
41.3	0.50537	0.00117	$4.3E+3$	0.50137	1.995	0.00233
41.4	0.50537	0.00116	$4.3E+3$	0.50137	1.995	0.00232
41.5	0.50538	0.00116	$4.3E+3$	0.50137	1.995	0.00231
41.6	0.50538	0.00115	$4.3E+3$	0.50137	1.995	0.0023
41.7	0.50539	0.00115	$4.4E+3$	0.50137	1.995	0.00229
41.8	0.50539	0.00114	$4.4E+3$	0.50136	1.995	0.00228
41.9	0.5054	0.00114	$4.4E+3$	0.50136	1.995	0.00227
42	0.5054	0.00113	$4.5E+3$	0.50136	1.995	0.00226
42.1	0.50541	0.00113	$4.5E+3$	0.50136	1.995	0.00224
42.2	0.50541	0.00112	$4.5E+3$	0.50136	1.995	0.00223
42.3	0.50542	0.00111	$4.6E+3$	0.50135	1.995	0.00222
42.4	0.50542	0.00111	$4.6E+3$	0.50135	1.995	0.00221
42.5	0.50543	0.0011	$4.6E+3$	0.50135	1.995	0.0022
42.6	0.50543	0.0011	$4.7E+3$	0.50135	1.995	0.00219
42.7	0.50544	0.00109	$4.7E+3$	0.50135	1.995	0.00218
42.8	0.50544	0.00109	$4.7E+3$	0.50134	1.995	0.00217
42.9	0.50544	0.00108	$4.8E+3$	0.50134	1.995	0.00216
43	0.50545	0.00108	$4.8E+3$	0.50134	1.995	0.00215
43.1	0.50545	0.00107	$4.8E+3$	0.50134	1.995	0.00214
43.2	0.50546	0.00107	$4.9E+3$	0.50134	1.995	0.00213
43.3	0.50546	0.00106	$4.9E+3$	0.50133	1.995	0.00212
43.4	0.50547	0.00106	$4.9E+3$	0.50133	1.995	0.00211
43.5	0.50547	0.00105	$5.0E+3$	0.50133	1.995	0.0021
43.6	0.50548	0.00105	$5.0E+3$	0.50133	1.995	0.00209
43.7	0.50548	0.00104	$5.0E+3$	0.50133	1.995	0.00208
43.8	0.50548	0.00104	$5.1E+3$	0.50133	1.995	0.00207
43.9	0.50549	0.00104	$5.1E+3$	0.50132	1.995	0.00206
44	0.50549	0.00103	$5.1E+3$	0.50132	1.995	0.00206
44.1	0.5055	0.00103	$5.2E+3$	0.50132	1.995	0.00205

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
44.2	0.5055	0.00102	$5.2E+3$	0.50132	1.995	0.00204
44.3	0.5055	0.00102	$5.2E+3$	0.50132	1.995	0.00203
44.4	0.50551	0.00101	$5.3E+3$	0.50131	1.995	0.00202
44.5	0.50551	0.00101	$5.3E+3$	0.50131	1.995	0.00201
44.6	0.50552	0.001	$5.3E+3$	0.50131	1.995	0.002
44.7	0.50552	0.000998	$5.4E+3$	0.50131	1.995	0.00199
44.8	0.50552	0.000994	$5.4E+3$	0.50131	1.995	0.00198
44.9	0.50553	0.000989	$5.5E+3$	0.50131	1.995	0.00197
45	0.50553	0.000985	$5.5E+3$	0.5013	1.995	0.00197
45.1	0.50554	0.000981	$5.5E+3$	0.5013	1.995	0.00196
45.2	0.50554	0.000976	$5.6E+3$	0.5013	1.995	0.00195
45.3	0.50554	0.000972	$5.6E+3$	0.5013	1.995	0.00194
45.4	0.50555	0.000968	$5.6E+3$	0.5013	1.995	0.00193
45.5	0.50555	0.000964	$5.7E+3$	0.5013	1.995	0.00192
45.6	0.50556	0.000959	$5.7E+3$	0.50129	1.995	0.00191
45.7	0.50556	0.000955	$5.8E+3$	0.50129	1.995	0.00191
45.8	0.50556	0.000951	$5.8E+3$	0.50129	1.995	0.0019
45.9	0.50557	0.000947	$5.8E+3$	0.50129	1.995	0.00189
46	0.50557	0.000943	$5.9E+3$	0.50129	1.995	0.00188
46.1	0.50557	0.000939	$5.9E+3$	0.50129	1.995	0.00187
46.2	0.50558	0.000935	$5.9E+3$	0.50129	1.995	0.00186
46.3	0.50558	0.000931	$6.0E+3$	0.50128	1.995	0.00186
46.4	0.50559	0.000927	$6.0E+3$	0.50128	1.995	0.00185
46.5	0.50559	0.000923	$6.1E+3$	0.50128	1.995	0.00184
46.6	0.50559	0.000919	$6.1E+3$	0.50128	1.995	0.00183
46.7	0.5056	0.000915	$6.1E+3$	0.50128	1.995	0.00182
46.8	0.5056	0.000911	$6.2E+3$	0.50128	1.995	0.00182
46.9	0.5056	0.000907	$6.2E+3$	0.50128	1.995	0.00181
47	0.50561	0.000903	$6.3E+3$	0.50127	1.995	0.0018
47.1	0.50561	0.000899	$6.3E+3$	0.50127	1.995	0.00179
47.2	0.50561	0.000895	$6.3E+3$	0.50127	1.995	0.00179
47.3	0.50562	0.000892	$6.4E+3$	0.50127	1.995	0.00178

Table 5.4: Fanno Flow Standard Basic Table k=1.67 (continue)

M	$\frac{4fL}{D}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho}{\rho^*}$	$\frac{U}{U^*}$	$\frac{T}{T^*}$
47.4	0.50562	0.000888	$6.4E+3$	0.50127	1.995	0.00177
47.5	0.50562	0.000884	$6.5E+3$	0.50127	1.995	0.00176
47.6	0.50563	0.00088	$6.5E+3$	0.50127	1.995	0.00176
47.7	0.50563	0.000877	$6.5E+3$	0.50126	1.995	0.00175
47.8	0.50563	0.000873	$6.6E+3$	0.50126	1.995	0.00174
47.9	0.50564	0.000869	$6.6E+3$	0.50126	1.995	0.00173
48	0.50564	0.000866	$6.7E+3$	0.50126	1.995	0.00173
48.1	0.50564	0.000862	$6.7E+3$	0.50126	1.995	0.00172
48.2	0.50565	0.000859	$6.7E+3$	0.50126	1.995	0.00171
48.3	0.50565	0.000855	$6.8E+3$	0.50126	1.995	0.00171
48.4	0.50565	0.000852	$6.8E+3$	0.50125	1.995	0.0017
48.5	0.50566	0.000848	$6.9E+3$	0.50125	1.995	0.00169
48.6	0.50566	0.000845	$6.9E+3$	0.50125	1.995	0.00169
48.7	0.50566	0.000841	$7.0E+3$	0.50125	1.995	0.00168
48.8	0.50566	0.000838	$7.0E+3$	0.50125	1.995	0.00167
48.9	0.50567	0.000834	$7.0E+3$	0.50125	1.995	0.00166
49	0.50567	0.000831	$7.1E+3$	0.50125	1.995	0.00166
49.1	0.50567	0.000828	$7.1E+3$	0.50125	1.995	0.00165
49.2	0.50568	0.000824	$7.2E+3$	0.50124	1.995	0.00164
49.3	0.50568	0.000821	$7.2E+3$	0.50124	1.995	0.00164
49.4	0.50568	0.000818	$7.3E+3$	0.50124	1.995	0.00163
49.5	0.50569	0.000814	$7.3E+3$	0.50124	1.995	0.00162
49.6	0.50569	0.000811	$7.3E+3$	0.50124	1.995	0.00162
49.7	0.50569	0.000808	$7.4E+3$	0.50124	1.995	0.00161
49.8	0.50569	0.000804	$7.4E+3$	0.50124	1.995	0.0016
49.9	0.5057	0.000801	$7.5E+3$	0.50124	1.995	0.0016
50	0.5057	0.000798	$7.5E+3$	0.50123	1.995	0.00159

Chapter 6

Rayleigh Flow

The tables in this chapter have extra points around $1/\sqrt{k}$ since it is a special point.

6.1 Rayleigh Flow Table for k=1.2

Table 6.1: Rayleigh Flow for k=1.2

M	$\frac{\mathbf{T}}{\mathbf{T^*}}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P^*}}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
0.01	0.000484	0.00044	2.2	1.242	0.00022
0.02	0.00193	0.00176	2.199	1.242	0.00088
0.03	0.00435	0.00395	2.198	1.241	0.00198
0.04	0.00771	0.00701	2.196	1.241	0.00351
0.05	0.012028	0.010937	2.193	1.24	0.00548
0.06	0.017274	0.01571	2.191	1.239	0.00789
0.07	0.02344	0.021319	2.187	1.238	0.010717
0.08	0.030506	0.02775	2.183	1.237	0.013973
0.09	0.038453	0.034985	2.179	1.236	0.017648
0.1	0.047259	0.043006	2.174	1.234	0.021739
0.11	0.0569	0.05179	2.169	1.233	0.026239
0.12	0.067348	0.061314	2.163	1.231	0.031142
0.13	0.078577	0.071554	2.156	1.23	0.036441
0.14	0.090554	0.082483	2.149	1.228	0.042129

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
0.15	0.10325	0.094074	2.142	1.226	0.048199
0.16	0.11663	0.1063	2.134	1.223	0.054641
0.17	0.13066	0.11912	2.126	1.221	0.061449
0.18	0.1453	0.13252	2.118	1.219	0.068612
0.19	0.16052	0.14645	2.109	1.216	0.076122
0.2	0.17627	0.16089	2.099	1.214	0.083969
0.21	0.19253	0.1758	2.089	1.211	0.092144
0.22	0.20924	0.19114	2.079	1.208	0.10064
0.23	0.22638	0.20689	2.069	1.205	0.10943
0.24	0.2439	0.22301	2.058	1.202	0.11853
0.25	0.26176	0.23945	2.047	1.199	0.12791
0.26	0.27993	0.2562	2.035	1.196	0.13756
0.27	0.29835	0.27321	2.023	1.193	0.14748
0.28	0.317	0.29044	2.011	1.19	0.15765
0.29	0.33584	0.30787	1.998	1.186	0.16806
0.3	0.35482	0.32547	1.986	1.183	0.1787
0.31	0.37391	0.34319	1.973	1.179	0.18956
0.32	0.39308	0.361	1.959	1.176	0.20063
0.33	0.41228	0.37888	1.946	1.172	0.21189
0.34	0.43149	0.3968	1.932	1.168	0.22334
0.35	0.45067	0.41471	1.918	1.165	0.23496
0.36	0.46978	0.43261	1.904	1.161	0.24675
0.37	0.4888	0.45045	1.89	1.157	0.25868
0.38	0.5077	0.46821	1.875	1.154	0.27076
0.39	0.52645	0.48587	1.86	1.15	0.28297
0.4	0.54502	0.5034	1.846	1.146	0.2953
0.41	0.56339	0.52078	1.831	1.142	0.30774
0.42	0.58152	0.53798	1.816	1.138	0.32028
0.43	0.59941	0.555	1.801	1.134	0.33291
0.44	0.61703	0.57179	1.785	1.131	0.34562
0.45	0.63435	0.58836	1.77	1.127	0.35841
0.46	0.65136	0.60468	1.754	1.123	0.37125
0.47	0.66804	0.62073	1.739	1.119	0.38415

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
0.48	0.68438	0.6365	1.723	1.115	0.39709
0.49	0.70037	0.65198	1.708	1.112	0.41007
0.5	0.71598	0.66716	1.692	1.108	0.42308
0.51	0.7312	0.68202	1.677	1.104	0.4361
0.52	0.74604	0.69656	1.661	1.1	0.44914
0.53	0.76047	0.71076	1.645	1.097	0.46219
0.54	0.77449	0.72461	1.63	1.093	0.47523
0.55	0.7881	0.73812	1.614	1.089	0.48826
0.56	0.80128	0.75128	1.598	1.086	0.50128
0.57	0.81403	0.76407	1.583	1.082	0.51427
0.58	0.82635	0.7765	1.567	1.079	0.52724
0.59	0.83824	0.78856	1.552	1.076	0.54018
0.6	0.84969	0.80026	1.536	1.072	0.55307
0.61	0.86071	0.81158	1.521	1.069	0.56592
0.62	0.87129	0.82253	1.506	1.066	0.57873
0.63	0.88143	0.83311	1.49	1.062	0.59147
0.64	0.89114	0.84331	1.475	1.059	0.60416
0.65	0.90042	0.85315	1.46	1.056	0.61679
0.66	0.90927	0.86262	1.445	1.053	0.62935
0.67	0.91769	0.87172	1.43	1.05	0.64184
0.68	0.9257	0.88046	1.415	1.048	0.65425
0.69	0.93328	0.88884	1.4	1.045	0.66659
0.7	0.94046	0.89686	1.385	1.042	0.67884
0.71	0.94723	0.90453	1.371	1.039	0.69101
0.72	0.9536	0.91185	1.356	1.037	0.7031
0.73	0.95957	0.91883	1.342	1.034	0.71509
0.74	0.96516	0.92547	1.328	1.032	0.727
0.75	0.97037	0.93178	1.313	1.03	0.73881
0.76	0.97521	0.93776	1.299	1.027	0.75052
0.77	0.97968	0.94342	1.285	1.025	0.76214
0.78	0.98379	0.94877	1.272	1.023	0.77365
0.79	0.98755	0.9538	1.258	1.021	0.78507
0.8	0.99097	0.95854	1.244	1.019	0.79638

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
0.81	0.99406	0.96298	1.231	1.017	0.80759
0.82	0.99681	0.96713	1.218	1.016	0.81869
0.83	0.99926	0.97099	1.204	1.014	0.82969
0.84	1.001	0.97459	1.191	1.012	0.84058
0.85	1.003	0.97791	1.178	1.011	0.85137
0.86	1.005	0.98097	1.166	1.009	0.86204
0.87	1.006	0.98377	1.153	1.008	0.87261
0.88	1.007	0.98633	1.14	1.007	0.88307
0.89	1.008	0.98864	1.128	1.006	0.89341
0.9	1.008	0.99072	1.116	1.005	0.90365
0.91	1.008	0.99257	1.103	1.004	0.91378
0.91032	1.008	0.99262	1.103	1.004	0.9141
0.91064	1.008	0.99268	1.103	1.004	0.91442
0.91096	1.008	0.99273	1.102	1.004	0.91474
0.91128	1.008	0.99279	1.102	1.004	0.91506
0.91159	1.008	0.99284	1.102	1.004	0.91538
0.91191	1.008	0.99289	1.101	1.004	0.91571
0.91223	1.008	0.99295	1.101	1.004	0.91603
0.91255	1.008	0.993	1.1	1.004	0.91635
0.91287	1.008	0.99306	1.1	1.004	0.91667
1.01	0.99809	0.99992	0.98916	1	1.009
1.02	0.99602	0.99968	0.97844	1	1.018
1.03	0.99378	0.99928	0.96785	1	1.027
1.04	0.99138	0.99874	0.95739	1.001	1.036
1.05	0.98884	0.99805	0.94705	1.001	1.044
1.06	0.98615	0.99723	0.93684	1.002	1.053
1.07	0.98332	0.99627	0.92675	1.002	1.061
1.08	0.98036	0.99519	0.91679	1.003	1.069
1.09	0.97728	0.99399	0.90695	1.004	1.078
1.1	0.97407	0.99267	0.89723	1.005	1.086
1.11	0.97075	0.99123	0.88763	1.006	1.094
1.12	0.96732	0.98969	0.87815	1.007	1.102
1.13	0.96378	0.98804	0.86878	1.009	1.109

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
1.14	0.96015	0.9863	0.85954	1.01	1.117
1.15	0.95642	0.98446	0.85041	1.011	1.125
1.16	0.9526	0.98253	0.84139	1.013	1.132
1.17	0.9487	0.98051	0.83249	1.015	1.14
1.18	0.94471	0.97842	0.8237	1.016	1.147
1.19	0.94066	0.97624	0.81502	1.018	1.154
1.2	0.93652	0.97399	0.80645	1.02	1.161
1.01	0.99809	0.99992	0.98916	1	1.009
1.02	0.99602	0.99968	0.97844	1	1.018
1.03	0.99378	0.99928	0.96785	1	1.027
1.04	0.99138	0.99874	0.95739	1.001	1.036
1.05	0.98884	0.99805	0.94705	1.001	1.044
1.06	0.98615	0.99723	0.93684	1.002	1.053
1.07	0.98332	0.99627	0.92675	1.002	1.061
1.08	0.98036	0.99519	0.91679	1.003	1.069
1.09	0.97728	0.99399	0.90695	1.004	1.078
1.1	0.97407	0.99267	0.89723	1.005	1.086
1.11	0.97075	0.99123	0.88763	1.006	1.094
1.12	0.96732	0.98969	0.87815	1.007	1.102
1.13	0.96378	0.98804	0.86878	1.009	1.109
1.14	0.96015	0.9863	0.85954	1.01	1.117
1.15	0.95642	0.98446	0.85041	1.011	1.125
1.16	0.9526	0.98253	0.84139	1.013	1.132
1.17	0.9487	0.98051	0.83249	1.015	1.14
1.18	0.94471	0.97842	0.8237	1.016	1.147
1.19	0.94066	0.97624	0.81502	1.018	1.154
1.2	0.93652	0.97399	0.80645	1.02	1.161
1.21	0.93233	0.97166	0.79799	1.023	1.168
1.22	0.92806	0.96927	0.78964	1.025	1.175
1.23	0.92374	0.96681	0.78139	1.027	1.182
1.24	0.91936	0.9643	0.77325	1.03	1.189
1.25	0.91493	0.96172	0.76522	1.032	1.196
1.26	0.91045	0.95909	0.75728	1.035	1.202

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
1.27	0.90593	0.95641	0.74945	1.038	1.209
1.28	0.90136	0.95367	0.74172	1.041	1.215
1.29	0.89676	0.9509	0.73409	1.044	1.222
1.3	0.89211	0.94807	0.72655	1.047	1.228
1.31	0.88744	0.94521	0.71911	1.05	1.234
1.32	0.88273	0.94231	0.71177	1.053	1.24
1.33	0.878	0.93937	0.70452	1.057	1.246
1.34	0.87324	0.9364	0.69737	1.06	1.252
1.35	0.86846	0.93339	0.6903	1.064	1.258
1.36	0.86366	0.93036	0.68333	1.068	1.264
1.37	0.85884	0.9273	0.67645	1.072	1.27
1.38	0.854	0.92422	0.66965	1.076	1.275
1.39	0.84915	0.92111	0.66295	1.08	1.281
1.4	0.84429	0.91798	0.65632	1.084	1.286
1.41	0.83942	0.91483	0.64979	1.089	1.292
1.42	0.83455	0.91166	0.64334	1.093	1.297
1.43	0.82967	0.90848	0.63696	1.098	1.303
1.44	0.82478	0.90528	0.63068	1.103	1.308
1.45	0.81989	0.90207	0.62447	1.108	1.313
1.46	0.815	0.89884	0.61834	1.113	1.318
1.47	0.81011	0.89561	0.61229	1.118	1.323
1.48	0.80523	0.89237	0.60631	1.123	1.328
1.49	0.80035	0.88912	0.60042	1.129	1.333
1.5	0.79547	0.88587	0.59459	1.134	1.338
1.51	0.7906	0.88261	0.58885	1.14	1.343
1.52	0.78574	0.87934	0.58317	1.146	1.347
1.53	0.78089	0.87608	0.57757	1.152	1.352
1.54	0.77604	0.87281	0.57203	1.158	1.357
1.55	0.77121	0.86954	0.56657	1.164	1.361
1.56	0.76639	0.86627	0.56118	1.17	1.366
1.57	0.76159	0.86301	0.55585	1.177	1.37
1.58	0.75679	0.85975	0.55059	1.184	1.375
1.59	0.75202	0.85649	0.5454	1.19	1.379

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
1.6	0.74726	0.85323	0.54028	1.197	1.383
1.61	0.74251	0.84998	0.53521	1.204	1.387
1.62	0.73779	0.84674	0.53021	1.212	1.391
1.63	0.73308	0.8435	0.52528	1.219	1.396
1.64	0.72839	0.84027	0.5204	1.227	1.4
1.65	0.72372	0.83704	0.51558	1.234	1.404
1.66	0.71907	0.83383	0.51083	1.242	1.408
1.67	0.71444	0.83062	0.50613	1.25	1.412
1.68	0.70983	0.82743	0.5015	1.258	1.415
1.69	0.70524	0.82424	0.49691	1.266	1.419
1.7	0.70068	0.82106	0.49239	1.275	1.423
1.71	0.69613	0.8179	0.48792	1.284	1.427
1.72	0.69161	0.81475	0.48351	1.292	1.43
1.73	0.68712	0.81161	0.47915	1.301	1.434
1.74	0.68265	0.80848	0.47484	1.31	1.438
1.75	0.6782	0.80536	0.47059	1.32	1.441
1.76	0.67378	0.80226	0.46639	1.329	1.445
1.77	0.66938	0.79917	0.46224	1.339	1.448
1.78	0.66501	0.7961	0.45813	1.348	1.452
1.79	0.66066	0.79304	0.45408	1.358	1.455
1.8	0.65634	0.78999	0.45008	1.369	1.458
1.81	0.65204	0.78696	0.44613	1.379	1.462
1.82	0.64777	0.78395	0.44222	1.389	1.465
1.83	0.64353	0.78095	0.43836	1.4	1.468
1.84	0.63931	0.77796	0.43455	1.411	1.471
1.85	0.63512	0.77499	0.43078	1.422	1.474
1.86	0.63096	0.77204	0.42706	1.433	1.477
1.87	0.62682	0.7691	0.42338	1.445	1.481
1.88	0.62271	0.76618	0.41974	1.456	1.484
1.89	0.61863	0.76328	0.41615	1.468	1.487
1.9	0.61457	0.76039	0.4126	1.48	1.489
1.91	0.61054	0.75752	0.4091	1.492	1.492
1.92	0.60654	0.75467	0.40563	1.505	1.495

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
1.93	0.60257	0.75183	0.4022	1.518	1.498
1.94	0.59862	0.74901	0.39882	1.53	1.501
1.95	0.5947	0.74621	0.39547	1.543	1.504
1.96	0.59081	0.74343	0.39216	1.557	1.507
1.97	0.58694	0.74066	0.38889	1.57	1.509
1.98	0.5831	0.73791	0.38566	1.584	1.512
1.99	0.57929	0.73518	0.38247	1.598	1.515
2	0.57551	0.73246	0.37931	1.612	1.517
2.01	0.57175	0.72976	0.37619	1.627	1.52
2.02	0.56802	0.72708	0.3731	1.641	1.522
2.03	0.56432	0.72442	0.37005	1.656	1.525
2.04	0.56064	0.72178	0.36704	1.671	1.527
2.05	0.55699	0.71915	0.36406	1.687	1.53
2.06	0.55337	0.71654	0.36111	1.702	1.532
2.07	0.54977	0.71395	0.3582	1.718	1.535
2.08	0.5462	0.71138	0.35532	1.734	1.537
2.09	0.54266	0.70882	0.35247	1.75	1.54
2.1	0.53915	0.70628	0.34965	1.767	1.542
2.11	0.53566	0.70376	0.34687	1.784	1.544
2.12	0.53219	0.70126	0.34411	1.801	1.547
2.13	0.52876	0.69877	0.34139	1.819	1.549
2.14	0.52535	0.6963	0.33869	1.836	1.551
2.15	0.52196	0.69385	0.33603	1.854	1.553
2.16	0.5186	0.69142	0.3334	1.872	1.556
2.17	0.51527	0.689	0.33079	1.891	1.558
2.18	0.51196	0.6866	0.32822	1.91	1.56
2.19	0.50868	0.68422	0.32567	1.929	1.562
2.2	0.50542	0.68186	0.32315	1.948	1.564
2.21	0.50219	0.67951	0.32066	1.968	1.566
2.22	0.49898	0.67718	0.31819	1.988	1.568
2.23	0.4958	0.67486	0.31575	2.008	1.57
2.24	0.49264	0.67257	0.31334	2.029	1.572
2.25	0.48951	0.67029	0.31095	2.05	1.574

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
2.26	0.4864	0.66803	0.30859	2.071	1.576
2.27	0.48331	0.66578	0.30626	2.093	1.578
2.28	0.48025	0.66355	0.30395	2.115	1.58
2.29	0.47721	0.66134	0.30166	2.137	1.582
2.3	0.4742	0.65914	0.2994	2.159	1.584
2.31	0.47121	0.65696	0.29716	2.182	1.586
2.32	0.46825	0.6548	0.29495	2.206	1.588
2.33	0.4653	0.65265	0.29276	2.229	1.589
2.34	0.46238	0.65052	0.29059	2.253	1.591
2.35	0.45949	0.6484	0.28845	2.278	1.593
2.36	0.45661	0.6463	0.28633	2.302	1.595
2.37	0.45376	0.64422	0.28423	2.327	1.596
2.38	0.45093	0.64215	0.28215	2.353	1.598
2.39	0.44813	0.64009	0.28009	2.379	1.6
2.4	0.44534	0.63806	0.27806	2.405	1.602
2.41	0.44258	0.63603	0.27604	2.432	1.603
2.42	0.43984	0.63403	0.27405	2.459	1.605
2.43	0.43712	0.63204	0.27208	2.486	1.607
2.44	0.43443	0.63006	0.27013	2.514	1.608
2.45	0.43175	0.6281	0.26819	2.542	1.61
2.46	0.4291	0.62615	0.26628	2.571	1.611
2.47	0.42646	0.62422	0.26439	2.6	1.613
2.48	0.42385	0.6223	0.26251	2.63	1.615
2.49	0.42126	0.6204	0.26066	2.66	1.616
2.5	0.41869	0.61851	0.25882	2.69	1.618
2.51	0.41613	0.61664	0.25701	2.721	1.619
2.52	0.4136	0.61478	0.25521	2.752	1.621
2.53	0.41109	0.61293	0.25342	2.784	1.622
2.54	0.4086	0.6111	0.25166	2.816	1.624
2.55	0.40613	0.60929	0.24991	2.849	1.625
2.56	0.40368	0.60748	0.24819	2.883	1.627
2.57	0.40124	0.60569	0.24647	2.916	1.628
2.58	0.39883	0.60392	0.24478	2.951	1.629

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0^*}$	$\frac{\rho^*}{\rho}$
2.59	0.39644	0.60216	0.2431	2.985	1.631
2.6	0.39406	0.60041	0.24144	3.021	1.632
2.61	0.39171	0.59867	0.23979	3.056	1.634
2.62	0.38937	0.59695	0.23817	3.093	1.635
2.63	0.38705	0.59524	0.23655	3.13	1.636
2.64	0.38475	0.59355	0.23495	3.167	1.638
2.65	0.38246	0.59186	0.23337	3.205	1.639
2.66	0.3802	0.59019	0.23181	3.244	1.64
2.67	0.37795	0.58854	0.23025	3.283	1.641
2.68	0.37572	0.58689	0.22872	3.322	1.643
2.69	0.37351	0.58526	0.22719	3.363	1.644
2.7	0.37131	0.58364	0.22569	3.403	1.645
2.71	0.36914	0.58203	0.22419	3.445	1.647
2.72	0.36698	0.58044	0.22272	3.487	1.648
2.73	0.36483	0.57885	0.22125	3.53	1.649
2.74	0.36271	0.57728	0.2198	3.573	1.65
2.75	0.3606	0.57572	0.21836	3.617	1.651
2.76	0.3585	0.57418	0.21694	3.662	1.653
2.77	0.35642	0.57264	0.21553	3.707	1.654
2.78	0.35436	0.57112	0.21413	3.753	1.655
2.79	0.35232	0.56961	0.21275	3.799	1.656
2.8	0.35029	0.56811	0.21138	3.847	1.657
2.81	0.34828	0.56662	0.21002	3.894	1.658
2.82	0.34628	0.56514	0.20867	3.943	1.659
2.83	0.3443	0.56367	0.20734	3.993	1.661
2.84	0.34233	0.56222	0.20602	4.043	1.662
2.85	0.34038	0.56077	0.20471	4.093	1.663
2.86	0.33844	0.55934	0.20341	4.145	1.664
2.87	0.33652	0.55792	0.20213	4.197	1.665
2.88	0.33461	0.5565	0.20085	4.25	1.666
2.89	0.33272	0.5551	0.19959	4.304	1.667
2.9	0.33084	0.55371	0.19834	4.359	1.668
2.91	0.32898	0.55233	0.1971	4.414	1.669

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
2.92	0.32713	0.55096	0.19587	4.471	1.67
2.93	0.3253	0.5496	0.19466	4.528	1.671
2.94	0.32348	0.54825	0.19345	4.586	1.672
2.95	0.32167	0.54691	0.19226	4.644	1.673
2.96	0.31988	0.54558	0.19107	4.704	1.674
2.97	0.3181	0.54426	0.1899	4.764	1.675
2.98	0.31633	0.54295	0.18874	4.826	1.676
2.99	0.31458	0.54165	0.18758	4.888	1.677
3	0.31284	0.54036	0.18644	4.951	1.678
3.01	0.31112	0.53908	0.18531	5.015	1.679
3.02	0.3094	0.53781	0.18419	5.08	1.68
3.03	0.3077	0.53655	0.18307	5.146	1.681
3.04	0.30602	0.5353	0.18197	5.213	1.682
3.05	0.30434	0.53405	0.18088	5.281	1.683
3.06	0.30268	0.53282	0.17979	5.35	1.684
3.07	0.30103	0.53159	0.17872	5.42	1.684
3.08	0.2994	0.53038	0.17765	5.49	1.685
3.09	0.29777	0.52917	0.1766	5.562	1.686
3.1	0.29616	0.52797	0.17555	5.635	1.687
3.11	0.29456	0.52679	0.17451	5.709	1.688
3.12	0.29297	0.52561	0.17348	5.784	1.689
3.13	0.2914	0.52443	0.17246	5.86	1.69
3.14	0.28983	0.52327	0.17145	5.938	1.69
3.15	0.28828	0.52212	0.17045	6.016	1.691
3.16	0.28674	0.52097	0.16946	6.095	1.692
3.17	0.28521	0.51983	0.16847	6.176	1.693
3.18	0.28369	0.5187	0.16749	6.258	1.694
3.19	0.28219	0.51758	0.16652	6.341	1.695
3.2	0.28069	0.51647	0.16556	6.425	1.695
3.21	0.2792	0.51536	0.16461	6.51	1.696
3.22	0.27773	0.51427	0.16367	6.597	1.697
3.23	0.27627	0.51318	0.16273	6.685	1.698
3.24	0.27482	0.5121	0.1618	6.774	1.699

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
3.25	0.27337	0.51102	0.16088	6.864	1.699
3.26	0.27194	0.50996	0.15996	6.956	1.7
3.27	0.27052	0.5089	0.15906	7.049	1.701
3.28	0.26911	0.50785	0.15816	7.143	1.702
3.29	0.26771	0.50681	0.15727	7.239	1.702
3.3	0.26632	0.50577	0.15638	7.336	1.703
3.31	0.26494	0.50474	0.15551	7.435	1.704
3.32	0.26357	0.50372	0.15464	7.534	1.704
3.33	0.26221	0.50271	0.15377	7.636	1.705
3.34	0.26086	0.5017	0.15292	7.739	1.706
3.35	0.25952	0.5007	0.15207	7.843	1.707
3.36	0.25819	0.49971	0.15123	7.948	1.707
3.37	0.25687	0.49873	0.15039	8.056	1.708
3.38	0.25556	0.49775	0.14957	8.164	1.709
3.39	0.25426	0.49678	0.14874	8.275	1.709
3.4	0.25297	0.49582	0.14793	8.387	1.71
3.41	0.25168	0.49486	0.14712	8.5	1.711
3.42	0.25041	0.49391	0.14632	8.615	1.711
3.43	0.24914	0.49296	0.14552	8.732	1.712
3.44	0.24789	0.49203	0.14473	8.85	1.713
3.45	0.24664	0.4911	0.14395	8.971	1.713
3.46	0.2454	0.49017	0.14317	9.092	1.714
3.47	0.24417	0.48926	0.1424	9.216	1.715
3.48	0.24295	0.48834	0.14164	9.341	1.715
3.49	0.24174	0.48744	0.14088	9.468	1.716
3.5	0.24054	0.48654	0.14013	9.597	1.717
3.51	0.23934	0.48565	0.13938	9.728	1.717
3.52	0.23816	0.48476	0.13864	9.861	1.718
3.53	0.23698	0.48388	0.1379	9.995	1.718
3.54	0.23581	0.48301	0.13717	10.13	1.719
3.55	0.23464	0.48214	0.13645	10.27	1.72
3.56	0.23349	0.48128	0.13573	10.41	1.72
3.57	0.23234	0.48042	0.13502	10.55	1.721

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
3.58	0.23121	0.47957	0.13431	10.7	1.721
3.59	0.23008	0.47873	0.13361	10.84	1.722
3.6	0.22895	0.47789	0.13291	10.99	1.723
3.61	0.22784	0.47706	0.13222	11.14	1.723
3.62	0.22673	0.47623	0.13154	11.29	1.724
3.63	0.22563	0.47541	0.13086	11.45	1.724
3.64	0.22454	0.47459	0.13018	11.61	1.725
3.65	0.22346	0.47378	0.12951	11.77	1.725
3.66	0.22238	0.47298	0.12885	11.93	1.726
3.67	0.22131	0.47218	0.12819	12.09	1.727
3.68	0.22025	0.47139	0.12753	12.26	1.727
3.69	0.2192	0.4706	0.12688	12.42	1.728
3.7	0.21815	0.46981	0.12623	12.6	1.728
3.71	0.21711	0.46904	0.12559	12.77	1.729
3.72	0.21608	0.46826	0.12496	12.94	1.729
3.73	0.21505	0.4675	0.12433	13.12	1.73
3.74	0.21403	0.46673	0.1237	13.3	1.73
3.75	0.21302	0.46598	0.12308	13.49	1.731
3.76	0.21201	0.46522	0.12246	13.67	1.731
3.77	0.21101	0.46448	0.12185	13.86	1.732
3.78	0.21002	0.46373	0.12124	14.05	1.732
3.79	0.20904	0.463	0.12063	14.24	1.733
3.8	0.20806	0.46226	0.12003	14.44	1.733
3.81	0.20708	0.46154	0.11944	14.64	1.734
3.82	0.20612	0.46081	0.11885	14.84	1.734
3.83	0.20516	0.4601	0.11826	15.04	1.735
3.84	0.20421	0.45938	0.11768	15.25	1.735
3.85	0.20326	0.45867	0.1171	15.46	1.736
3.86	0.20232	0.45797	0.11653	15.68	1.736
3.87	0.20139	0.45727	0.11596	15.89	1.737
3.88	0.20046	0.45658	0.11539	16.11	1.737
3.89	0.19954	0.45589	0.11483	16.33	1.738
3.9	0.19862	0.4552	0.11427	16.56	1.738

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
3.91	0.19771	0.45452	0.11372	16.79	1.739
3.92	0.19681	0.45384	0.11317	17.02	1.739
3.93	0.19591	0.45317	0.11262	17.25	1.739
3.94	0.19502	0.4525	0.11208	17.49	1.74
3.95	0.19413	0.45184	0.11154	17.73	1.74
3.96	0.19325	0.45118	0.11101	17.98	1.741
3.97	0.19238	0.45052	0.11048	18.23	1.741
3.98	0.19151	0.44987	0.10995	18.48	1.742
3.99	0.19064	0.44923	0.10943	18.73	1.742
4	0.18979	0.44858	0.10891	18.99	1.743
4.01	0.18893	0.44794	0.1084	19.25	1.743
4.02	0.18809	0.44731	0.10788	19.52	1.743
4.03	0.18725	0.44668	0.10737	19.79	1.744
4.04	0.18641	0.44605	0.10687	20.06	1.744
4.05	0.18558	0.44543	0.10637	20.34	1.745
4.06	0.18475	0.44481	0.10587	20.62	1.745
4.07	0.18393	0.4442	0.10537	20.9	1.746
4.08	0.18312	0.44359	0.10488	21.19	1.746
4.09	0.18231	0.44298	0.1044	21.48	1.746
4.1	0.18151	0.44238	0.10391	21.78	1.747
4.11	0.18071	0.44178	0.10343	22.08	1.747
4.12	0.17991	0.44118	0.10295	22.39	1.748
4.13	0.17912	0.44059	0.10248	22.7	1.748
4.14	0.17834	0.44	0.10201	23.01	1.748
4.15	0.17756	0.43942	0.10154	23.33	1.749
4.16	0.17679	0.43884	0.10107	23.65	1.749
4.17	0.17602	0.43826	0.10061	23.97	1.749
4.18	0.17525	0.43769	0.10015	24.3	1.75
4.19	0.17449	0.43712	0.099695	24.64	1.75
4.2	0.17374	0.43655	0.099242	24.98	1.751
4.21	0.17299	0.43599	0.098792	25.32	1.751
4.22	0.17224	0.43543	0.098346	25.67	1.751
4.23	0.1715	0.43487	0.097902	26.03	1.752

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
4.24	0.17076	0.43432	0.097461	26.38	1.752
4.25	0.17003	0.43377	0.097023	26.75	1.752
4.26	0.1693	0.43323	0.096588	27.12	1.753
4.27	0.16858	0.43268	0.096156	27.49	1.753
4.28	0.16786	0.43215	0.095727	27.87	1.754
4.29	0.16715	0.43161	0.0953	28.25	1.754
4.3	0.16644	0.43108	0.094877	28.64	1.754
4.31	0.16573	0.43055	0.094456	29.03	1.755
4.32	0.16503	0.43002	0.094038	29.43	1.755
4.33	0.16434	0.4295	0.093622	29.84	1.755
4.34	0.16364	0.42898	0.09321	30.25	1.756
4.35	0.16296	0.42846	0.0928	30.66	1.756
4.36	0.16227	0.42795	0.092392	31.08	1.756
4.37	0.16159	0.42744	0.091988	31.51	1.757
4.38	0.16092	0.42693	0.091585	31.94	1.757
4.39	0.16025	0.42643	0.091186	32.38	1.757
4.4	0.15958	0.42593	0.090789	32.83	1.758
4.41	0.15891	0.42543	0.090395	33.28	1.758
4.42	0.15825	0.42493	0.090003	33.73	1.758
4.43	0.1576	0.42444	0.089613	34.19	1.759
4.44	0.15695	0.42395	0.089227	34.66	1.759
4.45	0.1563	0.42347	0.088842	35.14	1.759
4.46	0.15566	0.42298	0.08846	35.62	1.76
4.47	0.15502	0.4225	0.088081	36.11	1.76
4.48	0.15438	0.42202	0.087704	36.6	1.76
4.49	0.15375	0.42155	0.087329	37.1	1.761
4.5	0.15312	0.42108	0.086957	37.61	1.761
4.51	0.15249	0.42061	0.086586	38.12	1.761
4.52	0.15187	0.42014	0.086219	38.64	1.761
4.53	0.15126	0.41968	0.085853	39.17	1.762
4.54	0.15064	0.41922	0.08549	39.71	1.762
4.55	0.15003	0.41876	0.085129	40.25	1.762
4.56	0.14942	0.4183	0.084771	40.8	1.763

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
4.57	0.14882	0.41785	0.084414	41.36	1.763
4.58	0.14822	0.4174	0.08406	41.92	1.763
4.59	0.14763	0.41695	0.083708	42.49	1.764
4.6	0.14703	0.41651	0.083359	43.07	1.764
4.61	0.14644	0.41606	0.083011	43.66	1.764
4.62	0.14586	0.41562	0.082665	44.25	1.764
4.63	0.14528	0.41519	0.082322	44.85	1.765
4.64	0.1447	0.41475	0.081981	45.46	1.765
4.65	0.14412	0.41432	0.081642	46.08	1.765
4.66	0.14355	0.41389	0.081305	46.71	1.766
4.67	0.14298	0.41346	0.08097	47.34	1.766
4.68	0.14242	0.41304	0.080637	47.99	1.766
4.69	0.14185	0.41261	0.080306	48.64	1.766
4.7	0.14129	0.41219	0.079977	49.3	1.767
4.71	0.14074	0.41177	0.07965	49.97	1.767
4.72	0.14019	0.41136	0.079325	50.64	1.767
4.73	0.13964	0.41095	0.079002	51.33	1.767
4.74	0.13909	0.41054	0.078681	52.03	1.768
4.75	0.13855	0.41013	0.078362	52.73	1.768
4.76	0.13801	0.40972	0.078044	53.44	1.768
4.77	0.13747	0.40932	0.077729	54.17	1.769
4.78	0.13693	0.40892	0.077416	54.9	1.769
4.79	0.1364	0.40852	0.077104	55.64	1.769
4.8	0.13587	0.40812	0.076794	56.39	1.769
4.81	0.13535	0.40772	0.076486	57.15	1.77
4.82	0.13483	0.40733	0.07618	57.92	1.77
4.83	0.13431	0.40694	0.075876	58.7	1.77
4.84	0.13379	0.40655	0.075574	59.5	1.77
4.85	0.13328	0.40617	0.075273	60.3	1.771
4.86	0.13277	0.40578	0.074974	61.11	1.771
4.87	0.13226	0.4054	0.074677	61.93	1.771
4.88	0.13176	0.40502	0.074381	62.77	1.771
4.89	0.13125	0.40464	0.074088	63.61	1.772

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
4.9	0.13075	0.40427	0.073796	64.46	1.772
4.91	0.13026	0.40389	0.073506	65.33	1.772
4.92	0.12976	0.40352	0.073217	66.21	1.772
4.93	0.12927	0.40315	0.07293	67.09	1.773
4.94	0.12878	0.40279	0.072645	67.99	1.773
4.95	0.1283	0.40242	0.072361	68.91	1.773
4.96	0.12782	0.40206	0.072079	69.83	1.773
4.97	0.12734	0.4017	0.071799	70.76	1.774
4.98	0.12686	0.40134	0.07152	71.71	1.774
4.99	0.12638	0.40098	0.071243	72.67	1.774
5	0.12591	0.40062	0.070968	73.64	1.774
5.02	0.12497	0.39992	0.070421	75.62	1.775
5.04	0.12405	0.39922	0.069881	77.65	1.775
5.06	0.12313	0.39853	0.069347	79.73	1.776
5.08	0.12222	0.39785	0.06882	81.87	1.776
5.1	0.12133	0.39717	0.068298	84.06	1.776
5.12	0.12044	0.39651	0.067781	86.31	1.777
5.14	0.11956	0.39584	0.067271	88.61	1.777
5.16	0.11869	0.39519	0.066766	90.97	1.778
5.18	0.11783	0.39454	0.066267	93.39	1.778
5.2	0.11698	0.3939	0.065774	95.88	1.779
5.22	0.11614	0.39327	0.065286	98.43	1.779
5.24	0.11531	0.39264	0.064803	$1.0E{+}2$	1.779
5.26	0.11448	0.39202	0.064325	$1.0E{+}2$	1.78
5.28	0.11367	0.39141	0.063853	$1.1E{+}2$	1.78
5.3	0.11286	0.3908	0.063386	$1.1E{+}2$	1.781
5.32	0.11206	0.3902	0.062924	$1.1E{+}2$	1.781
5.34	0.11127	0.38961	0.062467	$1.2E{+}2$	1.781
5.36	0.11049	0.38902	0.062015	$1.2E{+}2$	1.782
5.38	0.10971	0.38843	0.061567	$1.2E{+}2$	1.782
5.4	0.10895	0.38786	0.061125	$1.2E{+}2$	1.782
5.42	0.10819	0.38729	0.060687	$1.3E{+}2$	1.783
5.44	0.10744	0.38672	0.060254	$1.3E{+}2$	1.783

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T^*}}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P^*}}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
5.46	0.1067	0.38616	0.059825	1.3E+2	1.783
5.48	0.10596	0.38561	0.059401	1.4E+2	1.784
5.5	0.10523	0.38506	0.058981	1.4E+2	1.784
5.52	0.10451	0.38452	0.058566	1.5E+2	1.785
5.54	0.1038	0.38398	0.058155	1.5E+2	1.785
5.56	0.10309	0.38345	0.057748	1.5E+2	1.785
5.58	0.10239	0.38292	0.057346	1.6E+2	1.786
5.6	0.1017	0.3824	0.056948	1.6E+2	1.786
5.62	0.10102	0.38188	0.056553	1.7E+2	1.786
5.64	0.10034	0.38137	0.056163	1.7E+2	1.787
5.66	0.099665	0.38086	0.055777	1.7E+2	1.787
5.68	0.099	0.38036	0.055395	1.8E+2	1.787
5.7	0.098341	0.37987	0.055017	1.8E+2	1.787
5.72	0.097689	0.37937	0.054642	1.9E+2	1.788
5.74	0.097043	0.37889	0.054271	1.9E+2	1.788
5.76	0.096403	0.3784	0.053904	2.0E+2	1.788
5.78	0.095769	0.37793	0.053541	2.0E+2	1.789
5.8	0.095142	0.37745	0.053181	2.1E+2	1.789
5.82	0.094521	0.37699	0.052825	2.1E+2	1.789
5.84	0.093905	0.37652	0.052473	2.2E+2	1.79
5.86	0.093296	0.37606	0.052123	2.2E+2	1.79
5.88	0.092692	0.37561	0.051778	2.3E+2	1.79
5.9	0.092094	0.37516	0.051436	2.4E+2	1.79
5.92	0.091501	0.37471	0.051097	2.4E+2	1.791
5.94	0.090915	0.37427	0.050761	2.5E+2	1.791
5.96	0.090333	0.37383	0.050429	2.5E+2	1.791
5.98	0.089758	0.3734	0.0501	2.6E+2	1.792
6	0.089187	0.37297	0.049774	2.7E+2	1.792
6.02	0.088622	0.37254	0.049451	2.7E+2	1.792
6.04	0.088063	0.37212	0.049131	2.8E+2	1.792
6.06	0.087508	0.3717	0.048815	2.9E+2	1.793
6.08	0.086959	0.37128	0.048501	2.9E+2	1.793
6.1	0.086414	0.37087	0.048191	3.0E+2	1.793

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
6.12	0.085875	0.37047	0.047883	3.1E+2	1.793
6.14	0.085341	0.37006	0.047578	3.2E+2	1.794
6.16	0.084811	0.36967	0.047277	3.2E+2	1.794
6.18	0.084286	0.36927	0.046978	3.3E+2	1.794
6.2	0.083767	0.36888	0.046681	3.4E+2	1.794
6.22	0.083251	0.36849	0.046388	3.5E+2	1.795
6.24	0.082741	0.3681	0.046097	3.6E+2	1.795
6.26	0.082235	0.36772	0.045809	3.7E+2	1.795
6.28	0.081734	0.36734	0.045524	3.8E+2	1.795
6.3	0.081237	0.36697	0.045241	3.8E+2	1.796
6.32	0.080745	0.3666	0.044961	3.9E+2	1.796
6.34	0.080257	0.36623	0.044684	4.0E+2	1.796
6.36	0.079773	0.36587	0.044409	4.1E+2	1.796
6.38	0.079294	0.3655	0.044137	4.2E+2	1.797
6.4	0.078819	0.36515	0.043867	4.3E+2	1.797
6.42	0.078348	0.36479	0.043599	4.4E+2	1.797
6.44	0.077881	0.36444	0.043334	4.5E+2	1.797
6.46	0.077418	0.36409	0.043071	4.7E+2	1.797
6.48	0.07696	0.36374	0.042811	4.8E+2	1.798
6.5	0.076505	0.3634	0.042553	4.9E+2	1.798
6.52	0.076055	0.36306	0.042298	5.0E+2	1.798
6.54	0.075608	0.36272	0.042044	5.1E+2	1.798
6.56	0.075165	0.36239	0.041793	5.2E+2	1.799
6.58	0.074726	0.36206	0.041544	5.4E+2	1.799
6.6	0.074291	0.36173	0.041297	5.5E+2	1.799
6.62	0.073859	0.3614	0.041053	5.6E+2	1.799
6.64	0.073432	0.36108	0.040811	5.8E+2	1.799
6.66	0.073007	0.36076	0.04057	5.9E+2	1.8
6.68	0.072587	0.36044	0.040332	6.0E+2	1.8
6.7	0.07217	0.36013	0.040096	6.2E+2	1.8
6.72	0.071757	0.35982	0.039862	6.3E+2	1.8
6.74	0.071347	0.35951	0.03963	6.5E+2	1.8
6.76	0.07094	0.3592	0.0394	6.6E+2	1.8

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^{*}}$	$\frac{T_0}{T_0{}^{*}}$	$\frac{P}{P^{*}}$	$\frac{P_0}{P_0{}^{*}}$	$\frac{\rho^{*}}{\rho}$
6.78	0.070537	0.3589	0.039172	6.8E+2	1.801
6.8	0.070138	0.35859	0.038946	7.0E+2	1.801
6.82	0.069741	0.3583	0.038722	7.1E+2	1.801
6.84	0.069348	0.358	0.0385	7.3E+2	1.801
6.86	0.068959	0.3577	0.03828	7.5E+2	1.801
6.88	0.068572	0.35741	0.038061	7.6E+2	1.802
6.9	0.068189	0.35712	0.037845	7.8E+2	1.802
6.92	0.067809	0.35684	0.03763	8.0E+2	1.802
6.94	0.067432	0.35655	0.037417	8.2E+2	1.802
6.96	0.067058	0.35627	0.037206	8.4E+2	1.802
6.98	0.066687	0.35599	0.036997	8.6E+2	1.803
7	0.066319	0.35571	0.036789	8.8E+2	1.803
7.02	0.065954	0.35544	0.036583	9.0E+2	1.803
7.04	0.065593	0.35516	0.036379	9.2E+2	1.803
7.06	0.065234	0.35489	0.036177	9.4E+2	1.803
7.08	0.064878	0.35462	0.035976	9.6E+2	1.803
7.1	0.064525	0.35436	0.035777	9.8E+2	1.804
7.12	0.064174	0.35409	0.03558	1.0E+3	1.804
7.14	0.063827	0.35383	0.035384	1.0E+3	1.804
7.16	0.063482	0.35357	0.035189	1.1E+3	1.804
7.18	0.06314	0.35331	0.034997	1.1E+3	1.804
7.2	0.062801	0.35306	0.034806	1.1E+3	1.804
7.22	0.062464	0.3528	0.034616	1.1E+3	1.804
7.24	0.062131	0.35255	0.034428	1.1E+3	1.805
7.26	0.061799	0.3523	0.034242	1.2E+3	1.805
7.28	0.061471	0.35205	0.034057	1.2E+3	1.805
7.3	0.061145	0.3518	0.033873	1.2E+3	1.805
7.32	0.060821	0.35156	0.033691	1.3E+3	1.805
7.34	0.0605	0.35132	0.033511	1.3E+3	1.805
7.36	0.060182	0.35108	0.033332	1.3E+3	1.806
7.38	0.059866	0.35084	0.033154	1.3E+3	1.806
7.4	0.059553	0.3506	0.032978	1.4E+3	1.806
7.42	0.059242	0.35037	0.032803	1.4E+3	1.806

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
7.44	0.058933	0.35013	0.032629	1.4E+3	1.806
7.46	0.058627	0.3499	0.032457	1.5E+3	1.806
7.48	0.058323	0.34967	0.032286	1.5E+3	1.806
7.5	0.058021	0.34945	0.032117	1.5E+3	1.807
7.52	0.057722	0.34922	0.031949	1.6E+3	1.807
7.54	0.057425	0.349	0.031782	1.6E+3	1.807
7.56	0.05713	0.34877	0.031616	1.6E+3	1.807
7.58	0.056838	0.34855	0.031452	1.7E+3	1.807
7.6	0.056548	0.34833	0.031289	1.7E+3	1.807
7.62	0.056259	0.34812	0.031127	1.7E+3	1.807
7.64	0.055974	0.3479	0.030967	1.8E+3	1.808
7.66	0.05569	0.34768	0.030808	1.8E+3	1.808
7.68	0.055408	0.34747	0.03065	1.9E+3	1.808
7.7	0.055129	0.34726	0.030493	1.9E+3	1.808
7.72	0.054851	0.34705	0.030337	1.9E+3	1.808
7.74	0.054576	0.34684	0.030183	2.0E+3	1.808
7.76	0.054303	0.34664	0.03003	2.0E+3	1.808
7.78	0.054031	0.34643	0.029877	2.1E+3	1.808
7.8	0.053762	0.34623	0.029727	2.1E+3	1.809
7.82	0.053495	0.34603	0.029577	2.2E+3	1.809
7.84	0.05323	0.34583	0.029428	2.2E+3	1.809
7.86	0.052966	0.34563	0.02928	2.3E+3	1.809
7.88	0.052705	0.34543	0.029134	2.3E+3	1.809
7.9	0.052445	0.34523	0.028989	2.4E+3	1.809
7.92	0.052188	0.34504	0.028844	2.4E+3	1.809
7.94	0.051932	0.34485	0.028701	2.5E+3	1.809
7.96	0.051678	0.34465	0.028559	2.5E+3	1.81
7.98	0.051426	0.34446	0.028418	2.6E+3	1.81
8	0.051176	0.34427	0.028278	2.6E+3	1.81
8.02	0.050928	0.34409	0.028139	2.7E+3	1.81
8.04	0.050681	0.3439	0.028001	2.7E+3	1.81
8.06	0.050436	0.34372	0.027864	2.8E+3	1.81
8.08	0.050193	0.34353	0.027727	2.9E+3	1.81

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T^*}}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P^*}}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
8.1	0.049952	0.34335	0.027592	$2.9E{+}3$	1.81
8.12	0.049712	0.34317	0.027458	$3.0E{+}3$	1.81
8.14	0.049474	0.34299	0.027325	$3.0E{+}3$	1.811
8.16	0.049238	0.34281	0.027193	$3.1E{+}3$	1.811
8.18	0.049003	0.34263	0.027062	$3.2E{+}3$	1.811
8.2	0.04877	0.34246	0.026932	$3.2E{+}3$	1.811
8.22	0.048539	0.34228	0.026802	$3.3E{+}3$	1.811
8.24	0.04831	0.34211	0.026674	$3.4E{+}3$	1.811
8.26	0.048082	0.34194	0.026547	$3.4E{+}3$	1.811
8.28	0.047855	0.34177	0.02642	$3.5E{+}3$	1.811
8.3	0.04763	0.3416	0.026294	$3.6E{+}3$	1.811
8.32	0.047407	0.34143	0.02617	$3.7E{+}3$	1.812
8.34	0.047185	0.34126	0.026046	$3.7E{+}3$	1.812
8.36	0.046965	0.34109	0.025923	$3.8E{+}3$	1.812
8.38	0.046746	0.34093	0.025801	$3.9E{+}3$	1.812
8.4	0.046529	0.34076	0.025679	$4.0E{+}3$	1.812
8.42	0.046314	0.3406	0.025559	$4.0E{+}3$	1.812
8.44	0.046099	0.34044	0.025439	$4.1E{+}3$	1.812
8.46	0.045887	0.34028	0.025321	$4.2E{+}3$	1.812
8.48	0.045676	0.34012	0.025203	$4.3E{+}3$	1.812
8.5	0.045466	0.33996	0.025086	$4.4E{+}3$	1.812
8.52	0.045257	0.3398	0.024969	$4.5E{+}3$	1.813
8.54	0.04505	0.33965	0.024854	$4.6E{+}3$	1.813
8.56	0.044845	0.33949	0.024739	$4.7E{+}3$	1.813
8.58	0.044641	0.33934	0.024625	$4.8E{+}3$	1.813
8.6	0.044438	0.33918	0.024512	$4.8E{+}3$	1.813
8.62	0.044237	0.33903	0.0244	$4.9E{+}3$	1.813
8.64	0.044037	0.33888	0.024288	$5.0E{+}3$	1.813
8.66	0.043838	0.33873	0.024177	$5.1E{+}3$	1.813
8.68	0.04364	0.33858	0.024067	$5.2E{+}3$	1.813
8.7	0.043444	0.33843	0.023958	$5.4E{+}3$	1.813
8.72	0.04325	0.33828	0.023849	$5.5E{+}3$	1.813
8.74	0.043056	0.33814	0.023741	$5.6E{+}3$	1.814

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
8.76	0.042864	0.33799	0.023634	$5.7E{+}3$	1.814
8.78	0.042673	0.33785	0.023528	$5.8E{+}3$	1.814
8.8	0.042484	0.33771	0.023422	$5.9E{+}3$	1.814
8.82	0.042295	0.33756	0.023317	$6.0E{+}3$	1.814
8.84	0.042108	0.33742	0.023213	$6.1E{+}3$	1.814
8.86	0.041922	0.33728	0.023109	$6.3E{+}3$	1.814
8.88	0.041737	0.33714	0.023006	$6.4E{+}3$	1.814
8.9	0.041554	0.337	0.022904	$6.5E{+}3$	1.814
8.92	0.041372	0.33686	0.022803	$6.6E{+}3$	1.814
8.94	0.041191	0.33673	0.022702	$6.8E{+}3$	1.814
8.96	0.041011	0.33659	0.022602	$6.9E{+}3$	1.814
8.98	0.040832	0.33646	0.022502	$7.0E{+}3$	1.815
9	0.040654	0.33632	0.022403	$7.2E{+}3$	1.815
9.02	0.040478	0.33619	0.022305	$7.3E{+}3$	1.815
9.04	0.040303	0.33606	0.022207	$7.5E{+}3$	1.815
9.06	0.040128	0.33593	0.02211	$7.6E{+}3$	1.815
9.08	0.039955	0.33579	0.022014	$7.8E{+}3$	1.815
9.1	0.039784	0.33566	0.021918	$7.9E{+}3$	1.815
9.12	0.039613	0.33554	0.021823	$8.1E{+}3$	1.815
9.14	0.039443	0.33541	0.021729	$8.2E{+}3$	1.815
9.16	0.039274	0.33528	0.021635	$8.4E{+}3$	1.815
9.18	0.039107	0.33515	0.021542	$8.5E{+}3$	1.815
9.2	0.03894	0.33503	0.021449	$8.7E{+}3$	1.815
9.22	0.038775	0.3349	0.021357	$8.9E{+}3$	1.816
9.24	0.03861	0.33478	0.021266	$9.0E{+}3$	1.816
9.26	0.038447	0.33465	0.021175	$9.2E{+}3$	1.816
9.28	0.038284	0.33453	0.021084	$9.4E{+}3$	1.816
9.3	0.038123	0.33441	0.020995	$9.6E{+}3$	1.816
9.32	0.037963	0.33429	0.020906	$9.7E{+}3$	1.816
9.34	0.037803	0.33417	0.020817	$9.9E{+}3$	1.816
9.36	0.037645	0.33405	0.020729	$1.0E{+}4$	1.816
9.38	0.037488	0.33393	0.020642	$1.0E{+}4$	1.816
9.4	0.037331	0.33381	0.020555	$1.1E{+}4$	1.816

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
9.42	0.037176	0.33369	0.020468	$1.1E{+}4$	1.816
9.44	0.037022	0.33358	0.020382	$1.1E{+}4$	1.816
9.46	0.036868	0.33346	0.020297	$1.1E{+}4$	1.816
9.48	0.036715	0.33334	0.020212	$1.1E{+}4$	1.816
9.5	0.036564	0.33323	0.020128	$1.2E{+}4$	1.817
9.52	0.036413	0.33312	0.020044	$1.2E{+}4$	1.817
9.54	0.036263	0.333	0.019961	$1.2E{+}4$	1.817
9.56	0.036115	0.33289	0.019879	$1.2E{+}4$	1.817
9.58	0.035967	0.33278	0.019796	$1.2E{+}4$	1.817
9.6	0.03582	0.33267	0.019715	$1.3E{+}4$	1.817
9.62	0.035674	0.33256	0.019634	$1.3E{+}4$	1.817
9.64	0.035528	0.33245	0.019553	$1.3E{+}4$	1.817
9.66	0.035384	0.33234	0.019473	$1.3E{+}4$	1.817
9.68	0.03524	0.33223	0.019393	$1.4E{+}4$	1.817
9.7	0.035098	0.33212	0.019314	$1.4E{+}4$	1.817
9.72	0.034956	0.33201	0.019235	$1.4E{+}4$	1.817
9.74	0.034815	0.33191	0.019157	$1.4E{+}4$	1.817
9.76	0.034675	0.3318	0.019079	$1.5E{+}4$	1.817
9.78	0.034536	0.3317	0.019002	$1.5E{+}4$	1.817
9.8	0.034397	0.33159	0.018925	$1.5E{+}4$	1.818
9.82	0.03426	0.33149	0.018849	$1.5E{+}4$	1.818
9.84	0.034123	0.33138	0.018773	$1.6E{+}4$	1.818
9.86	0.033987	0.33128	0.018697	$1.6E{+}4$	1.818
9.88	0.033852	0.33118	0.018622	$1.6E{+}4$	1.818
9.9	0.033718	0.33108	0.018548	$1.7E{+}4$	1.818
9.92	0.033584	0.33098	0.018474	$1.7E{+}4$	1.818
9.94	0.033451	0.33088	0.0184	$1.7E{+}4$	1.818
9.96	0.033319	0.33078	0.018327	$1.8E{+}4$	1.818
9.98	0.033188	0.33068	0.018254	$1.8E{+}4$	1.818
1	0.033058	0.33058	0.018182	$1.8E{+}4$	1.818
10.1	0.032417	0.33009	0.017826	$2.0E{+}4$	1.818
10.2	0.031795	0.32962	0.017481	$2.2E{+}4$	1.819
10.3	0.03119	0.32917	0.017146	$2.4E{+}4$	1.819

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
10.4	0.030602	0.32872	0.016821	$2.6E{+}4$	1.819
10.5	0.030031	0.32829	0.016504	$2.8E{+}4$	1.82
10.6	0.029475	0.32787	0.016196	$3.1E{+}4$	1.82
10.7	0.028935	0.32746	0.015897	$3.3E{+}4$	1.82
10.8	0.028409	0.32706	0.015606	$3.6E{+}4$	1.82
10.9	0.027897	0.32667	0.015323	$4.0E{+}4$	1.821
11	0.027399	0.3263	0.015048	$4.3E{+}4$	1.821
11.1	0.026914	0.32593	0.01478	$4.7E{+}4$	1.821
11.2	0.026442	0.32557	0.014519	$5.1E{+}4$	1.821
11.3	0.025982	0.32523	0.014265	$5.5E{+}4$	1.821
11.4	0.025534	0.32489	0.014017	$5.9E{+}4$	1.822
11.5	0.025098	0.32456	0.013776	$6.4E{+}4$	1.822
11.6	0.024672	0.32423	0.013541	$7.0E{+}4$	1.822
11.7	0.024257	0.32392	0.013312	$7.5E{+}4$	1.822
11.8	0.023853	0.32361	0.013088	$8.2E{+}4$	1.822
11.9	0.023458	0.32332	0.012871	$8.8E{+}4$	1.823
12	0.023073	0.32303	0.012658	$9.5E{+}4$	1.823
12.1	0.022698	0.32274	0.012451	$1.0E{+}5$	1.823
12.2	0.022331	0.32246	0.012249	$1.1E{+}5$	1.823
12.3	0.021974	0.32219	0.012052	$1.2E{+}5$	1.823
12.4	0.021624	0.32193	0.011859	$1.3E{+}5$	1.823
12.5	0.021283	0.32167	0.011671	$1.4E{+}5$	1.824
12.6	0.020951	0.32142	0.011488	$1.5E{+}5$	1.824
12.7	0.020625	0.32117	0.011308	$1.6E{+}5$	1.824
12.8	0.020307	0.32093	0.011133	$1.7E{+}5$	1.824
12.9	0.019997	0.3207	0.010962	$1.9E{+}5$	1.824
13	0.019694	0.32047	0.010795	$2.0E{+}5$	1.824
13.1	0.019397	0.32024	0.010632	$2.2E{+}5$	1.824
13.2	0.019107	0.32002	0.010472	$2.3E{+}5$	1.825
13.3	0.018823	0.31981	0.010316	$2.5E{+}5$	1.825
13.4	0.018546	0.3196	0.010163	$2.7E{+}5$	1.825
13.5	0.018275	0.31939	0.010014	$2.9E{+}5$	1.825
13.6	0.018009	0.31919	0.00987	$3.1E{+}5$	1.825

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
13.7	0.01775	0.319	0.00972	3.3E+5	1.825
13.8	0.017496	0.3188	0.00958	3.5E+5	1.825
13.9	0.017247	0.31862	0.00945	3.8E+5	1.825
14	0.017004	0.31843	0.00931	4.0E+5	1.826
14.1	0.016765	0.31825	0.00918	4.3E+5	1.826
14.2	0.016532	0.31807	0.00905	4.6E+5	1.826
14.3	0.016303	0.3179	0.00893	4.9E+5	1.826
14.4	0.01608	0.31773	0.00881	5.2E+5	1.826
14.5	0.01586	0.31757	0.00869	5.6E+5	1.826
14.6	0.015645	0.3174	0.00857	6.0E+5	1.826
14.7	0.015435	0.31724	0.00845	6.4E+5	1.826
14.8	0.015229	0.31709	0.00834	6.8E+5	1.826
14.9	0.015026	0.31693	0.00823	7.2E+5	1.826
15	0.014828	0.31678	0.00812	7.7E+5	1.827
15.1	0.014634	0.31664	0.00801	8.2E+5	1.827
15.2	0.014443	0.31649	0.00791	8.8E+5	1.827
15.3	0.014257	0.31635	0.0078	9.3E+5	1.827
15.4	0.014073	0.31621	0.0077	9.9E+5	1.827
15.5	0.013894	0.31608	0.0076	1.1E+6	1.827
15.6	0.013717	0.31594	0.00751	1.1E+6	1.827
15.7	0.013544	0.31581	0.00741	1.2E+6	1.827
15.8	0.013374	0.31568	0.00732	1.3E+6	1.827
15.9	0.013208	0.31556	0.00723	1.3E+6	1.827
16	0.013044	0.31543	0.00714	1.4E+6	1.827
16.1	0.012884	0.31531	0.00705	1.5E+6	1.827
16.2	0.012726	0.31519	0.00696	1.6E+6	1.828
16.3	0.012572	0.31508	0.00688	1.7E+6	1.828
16.4	0.01242	0.31496	0.0068	1.8E+6	1.828
16.5	0.01227	0.31485	0.00671	1.9E+6	1.828
16.6	0.012124	0.31474	0.00663	2.0E+6	1.828
16.7	0.01198	0.31463	0.00655	2.2E+6	1.828
16.8	0.011839	0.31452	0.00648	2.3E+6	1.828
16.9	0.0117	0.31442	0.0064	2.4E+6	1.828

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
17	0.011563	0.31431	0.00633	2.6E+6	1.828
17.1	0.011429	0.31421	0.00625	2.7E+6	1.828
17.2	0.011298	0.31411	0.00618	2.9E+6	1.828
17.3	0.011168	0.31401	0.00611	3.0E+6	1.828
17.4	0.011041	0.31392	0.00604	3.2E+6	1.828
17.5	0.010916	0.31382	0.00597	3.4E+6	1.828
17.6	0.010793	0.31373	0.0059	3.6E+6	1.828
17.7	0.010672	0.31364	0.00584	3.8E+6	1.828
17.8	0.010553	0.31355	0.00577	4.0E+6	1.829
17.9	0.010436	0.31346	0.00571	4.2E+6	1.829
18	0.010321	0.31337	0.00564	4.4E+6	1.829
18.1	0.010207	0.31329	0.00558	4.7E+6	1.829
18.2	0.010096	0.3132	0.00552	4.9E+6	1.829
18.3	0.00999	0.31312	0.00546	5.2E+6	1.829
18.4	0.00988	0.31304	0.0054	5.5E+6	1.829
18.5	0.00977	0.31296	0.00534	5.8E+6	1.829
18.6	0.00967	0.31288	0.00529	6.1E+6	1.829
18.7	0.00957	0.3128	0.00523	6.4E+6	1.829
18.8	0.00947	0.31272	0.00517	6.7E+6	1.829
18.9	0.00937	0.31265	0.00512	7.1E+6	1.829
19	0.00927	0.31257	0.00507	7.5E+6	1.829
19.1	0.00917	0.3125	0.00501	7.8E+6	1.829
19.2	0.00908	0.31243	0.00496	8.3E+6	1.829
19.3	0.00898	0.31236	0.00491	8.7E+6	1.829
19.4	0.00889	0.31229	0.00486	9.1E+6	1.829
19.5	0.0088	0.31222	0.00481	9.6E+6	1.829
19.6	0.00871	0.31215	0.00476	1.0E+7	1.829
19.7	0.00862	0.31209	0.00471	1.1E+7	1.829
19.8	0.00854	0.31202	0.00467	1.1E+7	1.829
19.9	0.00845	0.31196	0.00462	1.2E+7	1.829
2	0.00837	0.31189	0.00457	1.2E+7	1.83
20.1	0.00829	0.31183	0.00453	1.3E+7	1.83
20.2	0.0082	0.31177	0.00448	1.4E+7	1.83

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
20.3	0.00812	0.31171	0.00444	1.4E+7	1.83
20.4	0.00804	0.31165	0.0044	1.5E+7	1.83
20.5	0.00797	0.31159	0.00435	1.6E+7	1.83
20.6	0.00789	0.31153	0.00431	1.6E+7	1.83
20.7	0.00781	0.31147	0.00427	1.7E+7	1.83
20.8	0.00774	0.31142	0.00423	1.8E+7	1.83
20.9	0.00767	0.31136	0.00419	1.9E+7	1.83
21	0.00759	0.31131	0.00415	2.0E+7	1.83
21.1	0.00752	0.31125	0.00411	2.1E+7	1.83
21.2	0.00745	0.3112	0.00407	2.2E+7	1.83
21.3	0.00738	0.31115	0.00403	2.3E+7	1.83
21.4	0.00731	0.31109	0.004	2.4E+7	1.83
21.5	0.00725	0.31104	0.00396	2.5E+7	1.83
21.6	0.00718	0.31099	0.00392	2.6E+7	1.83
21.7	0.00711	0.31094	0.00389	2.7E+7	1.83
21.8	0.00705	0.31089	0.00385	2.8E+7	1.83
21.9	0.00698	0.31085	0.00382	3.0E+7	1.83
22	0.00692	0.3108	0.00378	3.1E+7	1.83
22.1	0.00686	0.31075	0.00375	3.2E+7	1.83
22.2	0.0068	0.3107	0.00371	3.4E+7	1.83
22.3	0.00674	0.31066	0.00368	3.5E+7	1.83
22.4	0.00668	0.31061	0.00365	3.7E+7	1.83
22.5	0.00662	0.31057	0.00362	3.9E+7	1.83
22.6	0.00656	0.31052	0.00358	4.0E+7	1.83
22.7	0.0065	0.31048	0.00355	4.2E+7	1.83
22.8	0.00644	0.31044	0.00352	4.4E+7	1.83
22.9	0.00639	0.31039	0.00349	4.6E+7	1.83
23	0.00633	0.31035	0.00346	4.8E+7	1.83
23.1	0.00628	0.31031	0.00343	5.0E+7	1.83
23.2	0.00623	0.31027	0.0034	5.2E+7	1.83
23.3	0.00617	0.31023	0.00337	5.4E+7	1.831
23.4	0.00612	0.31019	0.00334	5.7E+7	1.831
23.5	0.00607	0.31015	0.00331	5.9E+7	1.831

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
23.6	0.00602	0.31011	0.00329	6.2E+7	1.831
23.7	0.00597	0.31007	0.00326	6.4E+7	1.831
23.8	0.00592	0.31004	0.00323	6.7E+7	1.831
23.9	0.00587	0.31	0.0032	7.0E+7	1.831
24	0.00582	0.30996	0.00318	7.3E+7	1.831
24.1	0.00577	0.30993	0.00315	7.6E+7	1.831
24.2	0.00572	0.30989	0.00313	7.9E+7	1.831
24.3	0.00568	0.30985	0.0031	8.2E+7	1.831
24.4	0.00563	0.30982	0.00308	8.5E+7	1.831
24.5	0.00558	0.30979	0.00305	8.9E+7	1.831
24.6	0.00554	0.30975	0.00303	9.3E+7	1.831
24.7	0.00549	0.30972	0.003	9.6E+7	1.831
24.8	0.00545	0.30968	0.00298	1.0E+8	1.831
24.9	0.00541	0.30965	0.00295	1.0E+8	1.831
25	0.00536	0.30962	0.00293	1.1E+8	1.831
25.1	0.00532	0.30959	0.00291	1.1E+8	1.831
25.2	0.00528	0.30955	0.00288	1.2E+8	1.831
25.3	0.00524	0.30952	0.00286	1.2E+8	1.831
25.4	0.0052	0.30949	0.00284	1.3E+8	1.831
25.5	0.00516	0.30946	0.00282	1.3E+8	1.831
25.6	0.00512	0.30943	0.00279	1.4E+8	1.831
25.7	0.00508	0.3094	0.00277	1.4E+8	1.831
25.8	0.00504	0.30937	0.00275	1.5E+8	1.831
25.9	0.005	0.30934	0.00273	1.5E+8	1.831
26	0.00496	0.30931	0.00271	1.6E+8	1.831
26.1	0.00492	0.30928	0.00269	1.7E+8	1.831
26.2	0.00488	0.30926	0.00267	1.7E+8	1.831
26.3	0.00485	0.30923	0.00265	1.8E+8	1.831
26.4	0.00481	0.3092	0.00263	1.9E+8	1.831
26.5	0.00477	0.30917	0.00261	1.9E+8	1.831
26.6	0.00474	0.30915	0.00259	2.0E+8	1.831
26.7	0.0047	0.30912	0.00257	2.1E+8	1.831
26.8	0.00467	0.30909	0.00255	2.1E+8	1.831

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T^*}}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P^*}}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
26.9	0.00463	0.30907	0.00253	$2.2E+8$	1.831
27	0.0046	0.30904	0.00251	$2.3E+8$	1.831
27.1	0.00457	0.30901	0.00249	$2.4E+8$	1.831
27.2	0.00453	0.30899	0.00248	$2.5E+8$	1.831
27.3	0.0045	0.30896	0.00246	$2.6E+8$	1.831
27.4	0.00447	0.30894	0.00244	$2.7E+8$	1.831
27.5	0.00443	0.30891	0.00242	$2.8E+8$	1.831
27.6	0.0044	0.30889	0.0024	$2.9E+8$	1.831
27.7	0.00437	0.30887	0.00239	$3.0E+8$	1.831
27.8	0.00434	0.30884	0.00237	$3.1E+8$	1.831
27.9	0.00431	0.30882	0.00235	$3.2E+8$	1.831
28	0.00428	0.3088	0.00234	$3.3E+8$	1.831
28.1	0.00425	0.30877	0.00232	$3.4E+8$	1.831
28.2	0.00422	0.30875	0.0023	$3.5E+8$	1.831
28.3	0.00419	0.30873	0.00229	$3.7E+8$	1.831
28.4	0.00416	0.30871	0.00227	$3.8E+8$	1.831
28.5	0.00413	0.30868	0.00225	$3.9E+8$	1.831
28.6	0.0041	0.30866	0.00224	$4.1E+8$	1.831
28.7	0.00407	0.30864	0.00222	$4.2E+8$	1.831
28.8	0.00404	0.30862	0.00221	$4.4E+8$	1.831
28.9	0.00402	0.3086	0.00219	$4.5E+8$	1.832
29	0.00399	0.30858	0.00218	$4.7E+8$	1.832
29.1	0.00396	0.30856	0.00216	$4.8E+8$	1.832
29.2	0.00393	0.30854	0.00215	$5.0E+8$	1.832
29.3	0.00391	0.30852	0.00213	$5.2E+8$	1.832
29.4	0.00388	0.3085	0.00212	$5.3E+8$	1.832
29.5	0.00385	0.30848	0.0021	$5.5E+8$	1.832
29.6	0.00383	0.30846	0.00209	$5.7E+8$	1.832
29.7	0.0038	0.30844	0.00208	$5.9E+8$	1.832
29.8	0.00378	0.30842	0.00206	$6.1E+8$	1.832
29.9	0.00375	0.3084	0.00205	$6.3E+8$	1.832
3	0.00373	0.30838	0.00204	$6.5E+8$	1.832
30.1	0.0037	0.30836	0.00202	$6.7E+8$	1.832

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
30.2	0.00368	0.30834	0.00201	7.0E+8	1.832
30.3	0.00365	0.30832	0.002	7.2E+8	1.832
30.4	0.00363	0.30831	0.00198	7.4E+8	1.832
30.5	0.00361	0.30829	0.00197	7.7E+8	1.832
30.6	0.00358	0.30827	0.00196	7.9E+8	1.832
30.7	0.00356	0.30825	0.00194	8.2E+8	1.832
30.8	0.00354	0.30823	0.00193	8.5E+8	1.832
30.9	0.00351	0.30822	0.00192	8.7E+8	1.832
31	0.00349	0.3082	0.00191	9.0E+8	1.832
31.1	0.00347	0.30818	0.00189	9.3E+8	1.832
31.2	0.00345	0.30817	0.00188	9.6E+8	1.832
31.3	0.00342	0.30815	0.00187	9.9E+8	1.832
31.4	0.0034	0.30813	0.00186	1.0E+9	1.832
31.5	0.00338	0.30812	0.00185	1.1E+9	1.832
31.6	0.00336	0.3081	0.00183	1.1E+9	1.832
31.7	0.00334	0.30809	0.00182	1.1E+9	1.832
31.8	0.00332	0.30807	0.00181	1.2E+9	1.832
31.9	0.0033	0.30805	0.0018	1.2E+9	1.832
32	0.00328	0.30804	0.00179	1.2E+9	1.832
32.1	0.00326	0.30802	0.00178	1.3E+9	1.832
32.2	0.00324	0.30801	0.00177	1.3E+9	1.832
32.3	0.00322	0.30799	0.00176	1.4E+9	1.832
32.4	0.0032	0.30798	0.00175	1.4E+9	1.832
32.5	0.00318	0.30796	0.00173	1.4E+9	1.832
32.6	0.00316	0.30795	0.00172	1.5E+9	1.832
32.7	0.00314	0.30793	0.00171	1.5E+9	1.832
32.8	0.00312	0.30792	0.0017	1.6E+9	1.832
32.9	0.0031	0.3079	0.00169	1.6E+9	1.832
33	0.00308	0.30789	0.00168	1.7E+9	1.832
33.1	0.00306	0.30788	0.00167	1.7E+9	1.832
33.2	0.00304	0.30786	0.00166	1.8E+9	1.832
33.3	0.00303	0.30785	0.00165	1.8E+9	1.832
33.4	0.00301	0.30783	0.00164	1.9E+9	1.832

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
33.5	0.00299	0.30782	0.00163	$1.9E{+}9$	1.832
33.6	0.00297	0.30781	0.00162	$2.0E{+}9$	1.832
33.7	0.00296	0.30779	0.00161	$2.1E{+}9$	1.832
33.8	0.00294	0.30778	0.0016	$2.1E{+}9$	1.832
33.9	0.00292	0.30777	0.00159	$2.2E{+}9$	1.832
34	0.0029	0.30775	0.00158	$2.2E{+}9$	1.832
34.1	0.00289	0.30774	0.00158	$2.3E{+}9$	1.832
34.2	0.00287	0.30773	0.00157	$2.4E{+}9$	1.832
34.3	0.00285	0.30772	0.00156	$2.5E{+}9$	1.832
34.4	0.00284	0.3077	0.00155	$2.5E{+}9$	1.832
34.5	0.00282	0.30769	0.00154	$2.6E{+}9$	1.832
34.6	0.0028	0.30768	0.00153	$2.7E{+}9$	1.832
34.7	0.00279	0.30767	0.00152	$2.8E{+}9$	1.832
34.8	0.00277	0.30766	0.00151	$2.8E{+}9$	1.832
34.9	0.00276	0.30764	0.0015	$2.9E{+}9$	1.832
35	0.00274	0.30763	0.0015	$3.0E{+}9$	1.832
35.1	0.00272	0.30762	0.00149	$3.1E{+}9$	1.832
35.2	0.00271	0.30761	0.00148	$3.2E{+}9$	1.832
35.3	0.00269	0.3076	0.00147	$3.3E{+}9$	1.832
35.4	0.00268	0.30758	0.00146	$3.4E{+}9$	1.832
35.5	0.00266	0.30757	0.00145	$3.4E{+}9$	1.832
35.6	0.00265	0.30756	0.00145	$3.5E{+}9$	1.832
35.7	0.00263	0.30755	0.00144	$3.6E{+}9$	1.832
35.8	0.00262	0.30754	0.00143	$3.7E{+}9$	1.832
35.9	0.0026	0.30753	0.00142	$3.9E{+}9$	1.832
36	0.00259	0.30752	0.00141	$4.0E{+}9$	1.832
36.1	0.00258	0.30751	0.00141	$4.1E{+}9$	1.832
36.2	0.00256	0.3075	0.0014	$4.2E{+}9$	1.832
36.3	0.00255	0.30749	0.00139	$4.3E{+}9$	1.832
36.4	0.00253	0.30747	0.00138	$4.4E{+}9$	1.832
36.5	0.00252	0.30746	0.00138	$4.5E{+}9$	1.832
36.6	0.00251	0.30745	0.00137	$4.7E{+}9$	1.832
36.7	0.00249	0.30744	0.00136	$4.8E{+}9$	1.832

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
36.8	0.00248	0.30743	0.00135	4.9E+9	1.832
36.9	0.00247	0.30742	0.00135	5.1E+9	1.832
37	0.00245	0.30741	0.00134	5.2E+9	1.832
37.1	0.00244	0.3074	0.00133	5.3E+9	1.832
37.2	0.00243	0.30739	0.00132	5.5E+9	1.832
37.3	0.00241	0.30738	0.00132	5.6E+9	1.832
37.4	0.0024	0.30737	0.00131	5.8E+9	1.832
37.5	0.00239	0.30736	0.0013	5.9E+9	1.832
37.6	0.00237	0.30735	0.0013	6.1E+9	1.832
37.7	0.00236	0.30734	0.00129	6.3E+9	1.832
37.8	0.00235	0.30734	0.00128	6.4E+9	1.832
37.9	0.00234	0.30733	0.00128	6.6E+9	1.832
38	0.00232	0.30732	0.00127	6.8E+9	1.832
38.1	0.00231	0.30731	0.00126	6.9E+9	1.832
38.2	0.0023	0.3073	0.00126	7.1E+9	1.832
38.3	0.00229	0.30729	0.00125	7.3E+9	1.832
38.4	0.00228	0.30728	0.00124	7.5E+9	1.832
38.5	0.00227	0.30727	0.00124	7.7E+9	1.832
38.6	0.00225	0.30726	0.00123	7.9E+9	1.832
38.7	0.00224	0.30725	0.00122	8.1E+9	1.832
38.8	0.00223	0.30724	0.00122	8.3E+9	1.832
38.9	0.00222	0.30724	0.00121	8.5E+9	1.832
39	0.00221	0.30723	0.0012	8.8E+9	1.832
39.1	0.0022	0.30722	0.0012	9.0E+9	1.832
39.2	0.00218	0.30721	0.00119	9.2E+9	1.832
39.3	0.00217	0.3072	0.00119	9.4E+9	1.832
39.4	0.00216	0.30719	0.00118	9.7E+9	1.832
39.5	0.00215	0.30719	0.00117	9.9E+9	1.832
39.6	0.00214	0.30718	0.00117	1.0E+1	1.832
39.7	0.00213	0.30717	0.00116	1.0E+1	1.832
39.8	0.00212	0.30716	0.00116	1.1E+1	1.832
39.9	0.00211	0.30715	0.00115	1.1E+1	1.832
4	0.0021	0.30715	0.00115	1.1E+1	1.832

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
40.1	0.00209	0.30714	0.00114	$1.2E+1$	1.832
40.2	0.00208	0.30713	0.00113	$1.2E+1$	1.832
40.3	0.00207	0.30712	0.00113	$1.2E+1$	1.832
40.4	0.00206	0.30711	0.00112	$1.2E+1$	1.832
40.5	0.00205	0.30711	0.00112	$1.3E+1$	1.832
40.6	0.00204	0.3071	0.00111	$1.3E+1$	1.832
40.7	0.00203	0.30709	0.00111	$1.3E+1$	1.832
40.8	0.00202	0.30708	0.0011	$1.4E+1$	1.832
40.9	0.00201	0.30708	0.0011	$1.4E+1$	1.832
41	0.002	0.30707	0.00109	$1.4E+1$	1.832
41.1	0.00199	0.30706	0.00108	$1.5E+1$	1.832
41.2	0.00198	0.30705	0.00108	$1.5E+1$	1.832
41.3	0.00197	0.30705	0.00107	$1.5E+1$	1.832
41.4	0.00196	0.30704	0.00107	$1.6E+1$	1.832
41.5	0.00195	0.30703	0.00106	$1.6E+1$	1.832
41.6	0.00194	0.30703	0.00106	$1.7E+1$	1.832
41.7	0.00193	0.30702	0.00105	$1.7E+1$	1.832
41.8	0.00192	0.30701	0.00105	$1.7E+1$	1.832
41.9	0.00191	0.307	0.00104	$1.8E+1$	1.832
42	0.0019	0.307	0.00104	$1.8E+1$	1.832
42.1	0.00189	0.30699	0.00103	$1.9E+1$	1.832
42.2	0.00189	0.30698	0.00103	$1.9E+1$	1.832
42.3	0.00188	0.30698	0.00102	$2.0E+1$	1.832
42.4	0.00187	0.30697	0.00102	$2.0E+1$	1.832
42.5	0.00186	0.30696	0.00101	$2.1E+1$	1.832
42.6	0.00185	0.30696	0.00101	$2.1E+1$	1.832
42.7	0.00184	0.30695	0.00101	$2.2E+1$	1.832
42.8	0.00183	0.30694	0.001	$2.2E+1$	1.832
42.9	0.00182	0.30694	0.000996	$2.3E+1$	1.833
43	0.00182	0.30693	0.000991	$2.3E+1$	1.833
43.1	0.00181	0.30693	0.000986	$2.4E+1$	1.833
43.2	0.0018	0.30692	0.000982	$2.4E+1$	1.833
43.3	0.00179	0.30691	0.000977	$2.5E+1$	1.833

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
43.4	0.00178	0.30691	0.000973	2.5E+1	1.833
43.5	0.00177	0.3069	0.000968	2.6E+1	1.833
43.6	0.00177	0.30689	0.000964	2.6E+1	1.833
43.7	0.00176	0.30689	0.00096	2.7E+1	1.833
43.8	0.00175	0.30688	0.000955	2.8E+1	1.833
43.9	0.00174	0.30688	0.000951	2.8E+1	1.833
44	0.00173	0.30687	0.000947	2.9E+1	1.833
44.1	0.00173	0.30686	0.000942	3.0E+1	1.833
44.2	0.00172	0.30686	0.000938	3.0E+1	1.833
44.3	0.00171	0.30685	0.000934	3.1E+1	1.833
44.4	0.0017	0.30685	0.00093	3.2E+1	1.833
44.5	0.0017	0.30684	0.000925	3.2E+1	1.833
44.6	0.00169	0.30683	0.000921	3.3E+1	1.833
44.7	0.00168	0.30683	0.000917	3.4E+1	1.833
44.8	0.00167	0.30682	0.000913	3.5E+1	1.833
44.9	0.00167	0.30682	0.000909	3.5E+1	1.833
45	0.00166	0.30681	0.000905	3.6E+1	1.833
45.1	0.00165	0.30681	0.000901	3.7E+1	1.833
45.2	0.00164	0.3068	0.000897	3.8E+1	1.833
45.3	0.00164	0.3068	0.000893	3.9E+1	1.833
45.4	0.00163	0.30679	0.000889	4.0E+1	1.833
45.5	0.00162	0.30678	0.000885	4.0E+1	1.833
45.6	0.00162	0.30678	0.000881	4.1E+1	1.833
45.7	0.00161	0.30677	0.000877	4.2E+1	1.833
45.8	0.0016	0.30677	0.000874	4.3E+1	1.833
45.9	0.00159	0.30676	0.00087	4.4E+1	1.833
46	0.00159	0.30676	0.000866	4.5E+1	1.833
46.1	0.00158	0.30675	0.000862	4.6E+1	1.833
46.2	0.00157	0.30675	0.000859	4.7E+1	1.833
46.3	0.00157	0.30674	0.000855	4.8E+1	1.833
46.4	0.00156	0.30674	0.000851	4.9E+1	1.833
46.5	0.00155	0.30673	0.000848	5.0E+1	1.833
46.6	0.00155	0.30673	0.000844	5.1E+1	1.833

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
46.7	0.00154	0.30672	0.00084	$5.2E{+}1$	1.833
46.8	0.00153	0.30672	0.000837	$5.4E{+}1$	1.833
46.9	0.00153	0.30671	0.000833	$5.5E{+}1$	1.833
47	0.00152	0.30671	0.00083	$5.6E{+}1$	1.833
47.1	0.00151	0.3067	0.000826	$5.7E{+}1$	1.833
47.2	0.00151	0.3067	0.000823	$5.8E{+}1$	1.833
47.3	0.0015	0.30669	0.000819	$6.0E{+}1$	1.833
47.4	0.00149	0.30669	0.000816	$6.1E{+}1$	1.833
47.5	0.00149	0.30668	0.000812	$6.2E{+}1$	1.833
47.6	0.00148	0.30668	0.000809	$6.3E{+}1$	1.833
47.7	0.00148	0.30667	0.000805	$6.5E{+}1$	1.833
47.8	0.00147	0.30667	0.000802	$6.6E{+}1$	1.833
47.9	0.00146	0.30666	0.000799	$6.8E{+}1$	1.833
48	0.00146	0.30666	0.000795	$6.9E{+}1$	1.833
48.1	0.00145	0.30666	0.000792	$7.0E{+}1$	1.833
48.2	0.00145	0.30665	0.000789	$7.2E{+}1$	1.833
48.3	0.00144	0.30665	0.000786	$7.3E{+}1$	1.833
48.4	0.00143	0.30664	0.000782	$7.5E{+}1$	1.833
48.5	0.00143	0.30664	0.000779	$7.6E{+}1$	1.833
48.6	0.00142	0.30663	0.000776	$7.8E{+}1$	1.833
48.7	0.00142	0.30663	0.000773	$8.0E{+}1$	1.833
48.8	0.00141	0.30662	0.00077	$8.1E{+}1$	1.833
48.9	0.0014	0.30662	0.000766	$8.3E{+}1$	1.833
49	0.0014	0.30662	0.000763	$8.5E{+}1$	1.833
49.1	0.00139	0.30661	0.00076	$8.6E{+}1$	1.833
49.2	0.00139	0.30661	0.000757	$8.8E{+}1$	1.833
49.3	0.00138	0.3066	0.000754	$9.0E{+}1$	1.833
49.4	0.00138	0.3066	0.000751	$9.2E{+}1$	1.833
49.5	0.00137	0.30659	0.000748	$9.4E{+}1$	1.833
49.6	0.00137	0.30659	0.000745	$9.6E{+}1$	1.833
49.7	0.00136	0.30659	0.000742	$9.7E{+}1$	1.833
49.8	0.00135	0.30658	0.000739	$9.9E{+}1$	1.833
49.9	0.00135	0.30658	0.000736	$1.0E{+}11$	1.833

Table 6.1: Rayleigh Flow for k=1.2 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
50	0.00134	0.30657	0.000733	$1.0E{+}11$	1.833

6.2 Rayleigh Flow Table for k=1.3

Table 6.2: Rayleigh Flow Table for k=1.3

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
0.01	0.000529	0.00046	2.3	1.255	0.00023
0.02	0.00211	0.00184	2.299	1.255	0.00092
0.03	0.00475	0.00413	2.297	1.254	0.00207
0.04	0.00843	0.00733	2.295	1.254	0.00367
0.05	0.013139	0.01143	2.293	1.253	0.00573
0.06	0.018867	0.016415	2.289	1.252	0.00824
0.07	0.025594	0.022272	2.285	1.251	0.011199
0.08	0.0333	0.028984	2.281	1.25	0.014599
0.09	0.041961	0.036532	2.276	1.249	0.018436
0.1	0.051551	0.044894	2.27	1.247	0.022705
0.11	0.062042	0.054047	2.264	1.245	0.027399
0.12	0.073402	0.063966	2.258	1.244	0.032511
0.13	0.085598	0.074622	2.251	1.242	0.038034
0.14	0.098596	0.085987	2.243	1.24	0.04396
0.15	0.11236	0.098031	2.235	1.237	0.050279
0.16	0.12684	0.11072	2.226	1.235	0.056984
0.17	0.14201	0.12402	2.217	1.233	0.064063
0.18	0.15782	0.1379	2.207	1.23	0.071508
0.19	0.17423	0.15233	2.197	1.227	0.079308
0.2	0.1912	0.16726	2.186	1.224	0.087452
0.21	0.20868	0.18266	2.175	1.222	0.09593
0.22	0.22662	0.19849	2.164	1.218	0.10473
0.23	0.24499	0.21472	2.152	1.215	0.11384
0.24	0.26373	0.23131	2.14	1.212	0.12325
0.25	0.2828	0.24822	2.127	1.209	0.13295

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{{T_0}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho^*}{\rho}$
0.26	0.30216	0.26541	2.114	1.205	0.14292
0.27	0.32176	0.28285	2.101	1.202	0.15316
0.28	0.34156	0.3005	2.087	1.198	0.16364
0.29	0.36152	0.31833	2.073	1.195	0.17437
0.3	0.38159	0.33629	2.059	1.191	0.18532
0.31	0.40172	0.35436	2.045	1.187	0.19648
0.32	0.42189	0.3725	2.03	1.183	0.20785
0.33	0.44206	0.39068	2.015	1.179	0.21941
0.34	0.46217	0.40886	2	1.176	0.23114
0.35	0.48221	0.42702	1.984	1.172	0.24305
0.36	0.50213	0.44512	1.968	1.168	0.2551
0.37	0.5219	0.46315	1.953	1.164	0.2673
0.38	0.5415	0.48106	1.936	1.16	0.27963
0.39	0.56088	0.49885	1.92	1.156	0.29208
0.4	0.58002	0.51647	1.904	1.152	0.30464
0.41	0.5989	0.53391	1.888	1.147	0.31729
0.42	0.61748	0.55115	1.871	1.143	0.33004
0.43	0.63576	0.56816	1.854	1.139	0.34286
0.44	0.65369	0.58494	1.838	1.135	0.35575
0.45	0.67128	0.60145	1.821	1.131	0.36869
0.46	0.68849	0.61769	1.804	1.127	0.38169
0.47	0.70531	0.63363	1.787	1.123	0.39472
0.48	0.72173	0.64928	1.77	1.119	0.40778
0.49	0.73772	0.6646	1.753	1.115	0.42087
0.5	0.75329	0.6796	1.736	1.111	0.43396
0.51	0.76842	0.69426	1.719	1.107	0.44706
0.52	0.7831	0.70858	1.702	1.103	0.46016
0.53	0.79732	0.72254	1.685	1.099	0.47325
0.54	0.81108	0.73614	1.668	1.096	0.48632
0.55	0.82437	0.74937	1.651	1.092	0.49937
0.56	0.83719	0.76224	1.634	1.088	0.51239
0.57	0.84953	0.77473	1.617	1.085	0.52537
0.58	0.8614	0.78684	1.6	1.081	0.53831

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
0.59	0.87279	0.79858	1.583	1.077	0.5512
0.6	0.8837	0.80993	1.567	1.074	0.56403
0.61	0.89414	0.82091	1.55	1.07	0.57681
0.62	0.9041	0.83151	1.534	1.067	0.58952
0.63	0.9136	0.84173	1.517	1.064	0.60217
0.64	0.92263	0.85158	1.501	1.061	0.61474
0.65	0.93119	0.86105	1.485	1.057	0.62724
0.66	0.9393	0.87015	1.468	1.054	0.63966
0.67	0.94696	0.87889	1.452	1.051	0.65199
0.68	0.95417	0.88726	1.436	1.048	0.66424
0.69	0.96094	0.89528	1.421	1.045	0.67639
0.7	0.96728	0.90294	1.405	1.043	0.68845
0.71	0.9732	0.91025	1.389	1.04	0.70042
0.72	0.9787	0.91722	1.374	1.037	0.71229
0.73	0.9838	0.92386	1.359	1.035	0.72406
0.74	0.98849	0.93016	1.344	1.032	0.73573
0.75	0.99279	0.93614	1.329	1.03	0.74729
0.76	0.99671	0.9418	1.314	1.028	0.75875
0.77	1	0.94715	1.299	1.025	0.7701
0.78	1.003	0.95219	1.284	1.023	0.78134
0.79	1.006	0.95693	1.27	1.021	0.79247
0.8	1.009	0.96139	1.255	1.019	0.80349
0.81	1.011	0.96555	1.241	1.017	0.8144
0.81745	1.012	0.96848	1.231	1.016	0.82246
0.8249	1.013	0.97125	1.22	1.015	0.83045
0.83235	1.015	0.97388	1.21	1.014	0.83838
0.8398	1.015	0.97636	1.2	1.012	0.84624
0.84725	1.016	0.9787	1.19	1.011	0.85404
0.85471	1.017	0.9809	1.18	1.01	0.86178
0.86216	1.017	0.98296	1.17	1.009	0.86946
0.86961	1.017	0.98489	1.16	1.008	0.87707
0.87706	1.017	0.98669	1.15	1.007	0.88462
0.91	1.016	0.99315	1.108	1.004	0.91722

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
0.92	1.015	0.99465	1.095	1.003	0.92687
0.93	1.014	0.99596	1.083	1.002	0.9364
0.94	1.012	0.99707	1.07	1.002	0.94583
0.95	1.011	0.99799	1.058	1.001	0.95514
0.96	1.009	0.99873	1.046	1.001	0.96433
0.97	1.007	0.99929	1.035	1	0.97342
0.98	1.005	0.99969	1.023	1	0.98239
0.99	1.003	0.99992	1.011	1	0.99125
1	1	1	1	1	1
1.01	0.99731	0.99993	0.98877	1	1.009
1.02	0.99446	0.99971	0.97768	1	1.017
1.03	0.99147	0.99934	0.96672	1	1.026
1.04	0.98833	0.99885	0.95591	1.001	1.034
1.05	0.98506	0.99823	0.94524	1.001	1.042
1.06	0.98165	0.99748	0.9347	1.002	1.05
1.07	0.97812	0.99661	0.9243	1.002	1.058
1.08	0.97448	0.99563	0.91403	1.003	1.066
1.09	0.97072	0.99454	0.9039	1.004	1.074
1.1	0.96686	0.99334	0.8939	1.005	1.082
1.11	0.96289	0.99204	0.88403	1.006	1.089
1.12	0.95883	0.99065	0.87429	1.007	1.097
1.13	0.95468	0.98916	0.86467	1.008	1.104
1.14	0.95045	0.98759	0.85518	1.01	1.111
1.15	0.94613	0.98593	0.84582	1.011	1.119
1.16	0.94175	0.9842	0.83658	1.013	1.126
1.17	0.93729	0.98239	0.82747	1.014	1.133
1.18	0.93276	0.9805	0.81847	1.016	1.14
1.19	0.92817	0.97855	0.80959	1.018	1.146
1.2	0.92353	0.97653	0.80084	1.02	1.153
1.01	0.99731	0.99993	0.98877	1	1.009
1.02	0.99446	0.99971	0.97768	1	1.017
1.03	0.99147	0.99934	0.96672	1	1.026
1.04	0.98833	0.99885	0.95591	1.001	1.034

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
1.05	0.98506	0.99823	0.94524	1.001	1.042
1.06	0.98165	0.99748	0.9347	1.002	1.05
1.07	0.97812	0.99661	0.9243	1.002	1.058
1.08	0.97448	0.99563	0.91403	1.003	1.066
1.09	0.97072	0.99454	0.9039	1.004	1.074
1.1	0.96686	0.99334	0.8939	1.005	1.082
1.11	0.96289	0.99204	0.88403	1.006	1.089
1.12	0.95883	0.99065	0.87429	1.007	1.097
1.13	0.95468	0.98916	0.86467	1.008	1.104
1.14	0.95045	0.98759	0.85518	1.01	1.111
1.15	0.94613	0.98593	0.84582	1.011	1.119
1.16	0.94175	0.9842	0.83658	1.013	1.126
1.17	0.93729	0.98239	0.82747	1.014	1.133
1.18	0.93276	0.9805	0.81847	1.016	1.14
1.19	0.92817	0.97855	0.80959	1.018	1.146
1.2	0.92353	0.97653	0.80084	1.02	1.153
1.21	0.91883	0.97445	0.79219	1.022	1.16
1.22	0.91408	0.97231	0.78367	1.024	1.166
1.23	0.90928	0.97011	0.77525	1.026	1.173
1.24	0.90444	0.96786	0.76695	1.029	1.179
1.25	0.89956	0.96556	0.75876	1.031	1.186
1.26	0.89465	0.96322	0.75068	1.034	1.192
1.27	0.8897	0.96083	0.74271	1.036	1.198
1.28	0.88473	0.9584	0.73484	1.039	1.204
1.29	0.87972	0.95593	0.72708	1.042	1.21
1.3	0.8747	0.95342	0.71942	1.045	1.216
1.31	0.86965	0.95088	0.71187	1.048	1.222
1.32	0.86458	0.9483	0.70442	1.051	1.227
1.33	0.8595	0.9457	0.69706	1.055	1.233
1.34	0.8544	0.94306	0.6898	1.058	1.239
1.35	0.84929	0.94041	0.68264	1.062	1.244
1.36	0.84417	0.93772	0.67558	1.065	1.25
1.37	0.83905	0.93502	0.66861	1.069	1.255

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
1.38	0.83392	0.93229	0.66173	1.073	1.26
1.39	0.82879	0.92955	0.65495	1.077	1.265
1.4	0.82365	0.92679	0.64825	1.081	1.271
1.41	0.81852	0.92401	0.64165	1.085	1.276
1.42	0.81339	0.92122	0.63513	1.089	1.281
1.43	0.80826	0.91842	0.6287	1.094	1.286
1.44	0.80314	0.91561	0.62235	1.098	1.291
1.45	0.79803	0.91279	0.61609	1.103	1.295
1.46	0.79292	0.90996	0.6099	1.108	1.3
1.47	0.78782	0.90712	0.60381	1.112	1.305
1.48	0.78274	0.90428	0.59779	1.117	1.309
1.49	0.77767	0.90143	0.59185	1.122	1.314
1.5	0.77261	0.89858	0.58599	1.128	1.318
1.51	0.76756	0.89572	0.5802	1.133	1.323
1.52	0.76253	0.89287	0.57449	1.138	1.327
1.53	0.75752	0.89001	0.56886	1.144	1.332
1.54	0.75253	0.88716	0.5633	1.149	1.336
1.55	0.74755	0.8843	0.55781	1.155	1.34
1.56	0.74259	0.88145	0.5524	1.161	1.344
1.57	0.73765	0.8786	0.54705	1.167	1.348
1.58	0.73274	0.87576	0.54177	1.173	1.352
1.59	0.72784	0.87292	0.53656	1.179	1.356
1.6	0.72297	0.87008	0.53142	1.186	1.36
1.61	0.71812	0.86725	0.52635	1.192	1.364
1.62	0.7133	0.86443	0.52134	1.199	1.368
1.63	0.70849	0.86161	0.51639	1.206	1.372
1.64	0.70372	0.8588	0.51151	1.212	1.376
1.65	0.69896	0.856	0.50669	1.219	1.379
1.66	0.69424	0.85321	0.50193	1.227	1.383
1.67	0.68954	0.85043	0.49724	1.234	1.387
1.68	0.68486	0.84766	0.4926	1.241	1.39
1.69	0.68022	0.8449	0.48802	1.249	1.394
1.7	0.6756	0.84215	0.4835	1.256	1.397

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
1.71	0.671	0.8394	0.47903	1.264	1.401
1.72	0.66644	0.83668	0.47463	1.272	1.404
1.73	0.6619	0.83396	0.47027	1.28	1.407
1.74	0.65739	0.83125	0.46598	1.288	1.411
1.75	0.65291	0.82856	0.46173	1.296	1.414
1.76	0.64846	0.82588	0.45754	1.305	1.417
1.77	0.64404	0.82321	0.4534	1.313	1.42
1.78	0.63964	0.82056	0.44931	1.322	1.424
1.79	0.63528	0.81792	0.44528	1.331	1.427
1.8	0.63095	0.81529	0.44129	1.34	1.43
1.81	0.62664	0.81268	0.43735	1.349	1.433
1.82	0.62236	0.81008	0.43346	1.358	1.436
1.83	0.61812	0.80749	0.42962	1.368	1.439
1.84	0.6139	0.80492	0.42582	1.377	1.442
1.85	0.60971	0.80237	0.42208	1.387	1.445
1.86	0.60556	0.79983	0.41837	1.397	1.447
1.87	0.60143	0.7973	0.41472	1.407	1.45
1.88	0.59733	0.79479	0.4111	1.417	1.453
1.89	0.59326	0.7923	0.40753	1.428	1.456
1.9	0.58922	0.78982	0.404	1.438	1.458
1.91	0.58522	0.78735	0.40052	1.449	1.461
1.92	0.58124	0.7849	0.39708	1.46	1.464
1.93	0.57729	0.78247	0.39368	1.47	1.466
1.94	0.57337	0.78005	0.39031	1.482	1.469
1.95	0.56948	0.77765	0.38699	1.493	1.472
1.96	0.56562	0.77526	0.38371	1.504	1.474
1.97	0.56179	0.77289	0.38047	1.516	1.477
1.98	0.55798	0.77053	0.37726	1.528	1.479
1.99	0.55421	0.76819	0.3741	1.54	1.481
2	0.55047	0.76587	0.37097	1.552	1.484
2.01	0.54675	0.76356	0.36787	1.564	1.486
2.02	0.54307	0.76127	0.36482	1.577	1.489
2.03	0.53941	0.75899	0.3618	1.589	1.491

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
2.04	0.53578	0.75673	0.35881	1.602	1.493
2.05	0.53218	0.75449	0.35586	1.615	1.495
2.06	0.52861	0.75226	0.35294	1.628	1.498
2.07	0.52507	0.75004	0.35006	1.641	1.5
2.08	0.52155	0.74785	0.34721	1.655	1.502
2.09	0.51807	0.74566	0.34439	1.669	1.504
2.1	0.51461	0.7435	0.3416	1.683	1.506
2.11	0.51118	0.74135	0.33885	1.697	1.509
2.12	0.50777	0.73921	0.33612	1.711	1.511
2.13	0.5044	0.73709	0.33343	1.726	1.513
2.14	0.50105	0.73499	0.33077	1.74	1.515
2.15	0.49773	0.7329	0.32814	1.755	1.517
2.16	0.49443	0.73083	0.32554	1.77	1.519
2.17	0.49116	0.72877	0.32296	1.785	1.521
2.18	0.48792	0.72673	0.32042	1.801	1.523
2.19	0.4847	0.7247	0.3179	1.817	1.525
2.2	0.48151	0.72269	0.31541	1.832	1.527
2.21	0.47835	0.72069	0.31295	1.849	1.528
2.22	0.47521	0.71871	0.31052	1.865	1.53
2.23	0.4721	0.71674	0.30811	1.881	1.532
2.24	0.46901	0.71479	0.30573	1.898	1.534
2.25	0.46595	0.71285	0.30338	1.915	1.536
2.26	0.46291	0.71093	0.30105	1.932	1.538
2.27	0.4599	0.70902	0.29875	1.95	1.539
2.28	0.45691	0.70713	0.29647	1.967	1.541
2.29	0.45395	0.70525	0.29422	1.985	1.543
2.3	0.45101	0.70339	0.29199	2.003	1.545
2.31	0.4481	0.70153	0.28978	2.021	1.546
2.32	0.44521	0.6997	0.2876	2.04	1.548
2.33	0.44234	0.69788	0.28545	2.059	1.55
2.34	0.4395	0.69607	0.28331	2.078	1.551
2.35	0.43668	0.69428	0.2812	2.097	1.553
2.36	0.43389	0.6925	0.27911	2.117	1.555

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
2.37	0.43111	0.69073	0.27704	2.136	1.556
2.38	0.42836	0.68898	0.275	2.156	1.558
2.39	0.42563	0.68724	0.27297	2.177	1.559
2.4	0.42293	0.68551	0.27097	2.197	1.561
2.41	0.42025	0.6838	0.26899	2.218	1.562
2.42	0.41759	0.6821	0.26703	2.239	1.564
2.43	0.41495	0.68042	0.26509	2.26	1.565
2.44	0.41233	0.67874	0.26317	2.282	1.567
2.45	0.40973	0.67709	0.26127	2.303	1.568
2.46	0.40716	0.67544	0.25939	2.325	1.57
2.47	0.40461	0.67381	0.25753	2.348	1.571
2.48	0.40207	0.67218	0.25568	2.37	1.573
2.49	0.39956	0.67058	0.25386	2.393	1.574
2.5	0.39707	0.66898	0.25205	2.416	1.575
2.51	0.3946	0.6674	0.25027	2.44	1.577
2.52	0.39215	0.66583	0.2485	2.464	1.578
2.53	0.38972	0.66427	0.24675	2.488	1.579
2.54	0.38731	0.66272	0.24502	2.512	1.581
2.55	0.38492	0.66119	0.2433	2.537	1.582
2.56	0.38255	0.65967	0.2416	2.562	1.583
2.57	0.3802	0.65816	0.23992	2.587	1.585
2.58	0.37787	0.65666	0.23826	2.612	1.586
2.59	0.37556	0.65517	0.23661	2.638	1.587
2.6	0.37326	0.6537	0.23498	2.664	1.588
2.61	0.37099	0.65223	0.23337	2.691	1.59
2.62	0.36873	0.65078	0.23177	2.718	1.591
2.63	0.36649	0.64934	0.23018	2.745	1.592
2.64	0.36427	0.64791	0.22862	2.772	1.593
2.65	0.36207	0.64649	0.22707	2.8	1.595
2.66	0.35989	0.64508	0.22553	2.828	1.596
2.67	0.35772	0.64369	0.22401	2.857	1.597
2.68	0.35557	0.6423	0.2225	2.885	1.598
2.69	0.35344	0.64093	0.22101	2.914	1.599

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
2.7	0.35133	0.63956	0.21953	2.944	1.6
2.71	0.34923	0.63821	0.21806	2.974	1.601
2.72	0.34715	0.63687	0.21661	3.004	1.603
2.73	0.34508	0.63554	0.21518	3.034	1.604
2.74	0.34304	0.63421	0.21376	3.065	1.605
2.75	0.34101	0.6329	0.21235	3.096	1.606
2.76	0.33899	0.6316	0.21095	3.128	1.607
2.77	0.337	0.63031	0.20957	3.16	1.608
2.78	0.33501	0.62903	0.2082	3.192	1.609
2.79	0.33305	0.62776	0.20685	3.225	1.61
2.8	0.3311	0.62649	0.2055	3.258	1.611
2.81	0.32916	0.62524	0.20417	3.292	1.612
2.82	0.32724	0.624	0.20286	3.326	1.613
2.83	0.32534	0.62277	0.20155	3.36	1.614
2.84	0.32345	0.62154	0.20026	3.395	1.615
2.85	0.32158	0.62033	0.19897	3.43	1.616
2.86	0.31972	0.61913	0.19771	3.465	1.617
2.87	0.31787	0.61793	0.19645	3.501	1.618
2.88	0.31605	0.61674	0.1952	3.537	1.619
2.89	0.31423	0.61557	0.19397	3.574	1.62
2.9	0.31243	0.6144	0.19274	3.611	1.621
2.91	0.31064	0.61324	0.19153	3.649	1.622
2.92	0.30887	0.61209	0.19033	3.687	1.623
2.93	0.30711	0.61095	0.18914	3.725	1.624
2.94	0.30537	0.60982	0.18796	3.764	1.625
2.95	0.30364	0.60869	0.18679	3.804	1.626
2.96	0.30192	0.60758	0.18563	3.844	1.626
2.97	0.30022	0.60647	0.18448	3.884	1.627
2.98	0.29852	0.60537	0.18335	3.925	1.628
2.99	0.29685	0.60428	0.18222	3.966	1.629
3	0.29518	0.6032	0.1811	4.007	1.63
3.01	0.29353	0.60213	0.18	4.05	1.631
3.02	0.29189	0.60106	0.1789	4.092	1.632

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
3.03	0.29027	0.6	0.17781	4.135	1.632
3.04	0.28865	0.59895	0.17673	4.179	1.633
3.05	0.28705	0.59791	0.17566	4.223	1.634
3.06	0.28546	0.59688	0.1746	4.267	1.635
3.07	0.28389	0.59585	0.17355	4.313	1.636
3.08	0.28232	0.59483	0.17251	4.358	1.637
3.09	0.28077	0.59382	0.17148	4.404	1.637
3.1	0.27923	0.59282	0.17046	4.451	1.638
3.11	0.2777	0.59182	0.16944	4.498	1.639
3.12	0.27618	0.59083	0.16844	4.546	1.64
3.13	0.27468	0.58985	0.16744	4.594	1.64
3.14	0.27319	0.58888	0.16646	4.643	1.641
3.15	0.2717	0.58791	0.16548	4.692	1.642
3.16	0.27023	0.58695	0.16451	4.742	1.643
3.17	0.26877	0.586	0.16354	4.792	1.643
3.18	0.26732	0.58505	0.16259	4.843	1.644
3.19	0.26588	0.58412	0.16164	4.895	1.645
3.2	0.26446	0.58319	0.1607	4.947	1.646
3.21	0.26304	0.58226	0.15977	4.999	1.646
3.22	0.26163	0.58134	0.15885	5.053	1.647
3.23	0.26024	0.58043	0.15794	5.107	1.648
3.24	0.25885	0.57953	0.15703	5.161	1.648
3.25	0.25748	0.57863	0.15613	5.216	1.649
3.26	0.25612	0.57774	0.15524	5.272	1.65
3.27	0.25476	0.57685	0.15435	5.328	1.65
3.28	0.25342	0.57598	0.15348	5.385	1.651
3.29	0.25208	0.5751	0.15261	5.442	1.652
3.3	0.25076	0.57424	0.15175	5.5	1.653
3.31	0.24944	0.57338	0.15089	5.559	1.653
3.32	0.24814	0.57253	0.15004	5.619	1.654
3.33	0.24685	0.57168	0.1492	5.679	1.654
3.34	0.24556	0.57084	0.14837	5.74	1.655
3.35	0.24428	0.57	0.14754	5.801	1.656

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
3.36	0.24302	0.56918	0.14672	5.863	1.656
3.37	0.24176	0.56835	0.1459	5.926	1.657
3.38	0.24051	0.56754	0.14509	5.989	1.658
3.39	0.23927	0.56673	0.14429	6.053	1.658
3.4	0.23804	0.56592	0.1435	6.118	1.659
3.41	0.23682	0.56512	0.14271	6.184	1.659
3.42	0.23561	0.56433	0.14193	6.25	1.66
3.43	0.23441	0.56354	0.14115	6.317	1.661
3.44	0.23321	0.56276	0.14038	6.384	1.661
3.45	0.23203	0.56198	0.13962	6.453	1.662
3.46	0.23085	0.56121	0.13886	6.522	1.662
3.47	0.22968	0.56044	0.13811	6.592	1.663
3.48	0.22852	0.55968	0.13737	6.663	1.664
3.49	0.22737	0.55893	0.13663	6.734	1.664
3.5	0.22622	0.55818	0.13589	6.806	1.665
3.51	0.22509	0.55743	0.13517	6.879	1.665
3.52	0.22396	0.55669	0.13444	6.953	1.666
3.53	0.22284	0.55596	0.13373	7.027	1.666
3.54	0.22173	0.55523	0.13302	7.103	1.667
3.55	0.22062	0.55451	0.13231	7.179	1.667
3.56	0.21953	0.55379	0.13161	7.256	1.668
3.57	0.21844	0.55307	0.13092	7.333	1.669
3.58	0.21736	0.55236	0.13023	7.412	1.669
3.59	0.21628	0.55166	0.12954	7.491	1.67
3.6	0.21522	0.55096	0.12887	7.571	1.67
3.61	0.21416	0.55027	0.12819	7.653	1.671
3.62	0.21311	0.54958	0.12752	7.734	1.671
3.63	0.21207	0.54889	0.12686	7.817	1.672
3.64	0.21103	0.54821	0.1262	7.901	1.672
3.65	0.21	0.54754	0.12555	7.985	1.673
3.66	0.20898	0.54687	0.1249	8.071	1.673
3.67	0.20797	0.5462	0.12426	8.157	1.674
3.68	0.20696	0.54554	0.12362	8.245	1.674

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
3.69	0.20596	0.54488	0.12299	8.333	1.675
3.7	0.20497	0.54423	0.12236	8.422	1.675
3.71	0.20398	0.54358	0.12174	8.512	1.676
3.72	0.203	0.54294	0.12112	8.603	1.676
3.73	0.20203	0.5423	0.1205	8.695	1.677
3.74	0.20106	0.54166	0.11989	8.788	1.677
3.75	0.2001	0.54103	0.11929	8.881	1.677
3.76	0.19915	0.54041	0.11869	8.976	1.678
3.77	0.1982	0.53978	0.11809	9.072	1.678
3.78	0.19726	0.53917	0.1175	9.169	1.679
3.79	0.19633	0.53855	0.11691	9.267	1.679
3.8	0.1954	0.53794	0.11633	9.366	1.68
3.81	0.19448	0.53734	0.11575	9.465	1.68
3.82	0.19356	0.53673	0.11517	9.566	1.681
3.83	0.19265	0.53614	0.1146	9.668	1.681
3.84	0.19175	0.53554	0.11403	9.771	1.682
3.85	0.19085	0.53495	0.11347	9.875	1.682
3.86	0.18996	0.53437	0.11291	9.98	1.682
3.87	0.18908	0.53378	0.11236	10.09	1.683
3.88	0.1882	0.53321	0.11181	10.19	1.683
3.89	0.18733	0.53263	0.11126	10.3	1.684
3.9	0.18646	0.53206	0.11072	10.41	1.684
3.91	0.1856	0.53149	0.11018	10.52	1.684
3.92	0.18474	0.53093	0.10965	10.63	1.685
3.93	0.18389	0.53037	0.10912	10.75	1.685
3.94	0.18305	0.52982	0.10859	10.86	1.686
3.95	0.18221	0.52926	0.10807	10.98	1.686
3.96	0.18138	0.52871	0.10755	11.09	1.687
3.97	0.18055	0.52817	0.10703	11.21	1.687
3.98	0.17973	0.52763	0.10652	11.33	1.687
3.99	0.17891	0.52709	0.10601	11.45	1.688
4	0.1781	0.52656	0.1055	11.57	1.688
4.01	0.17729	0.52602	0.105	11.69	1.688

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
4.02	0.17649	0.5255	0.1045	11.82	1.689
4.03	0.1757	0.52497	0.10401	11.94	1.689
4.04	0.17491	0.52445	0.10352	12.07	1.69
4.05	0.17412	0.52393	0.10303	12.19	1.69
4.06	0.17334	0.52342	0.10255	12.32	1.69
4.07	0.17257	0.52291	0.10207	12.45	1.691
4.08	0.1718	0.5224	0.10159	12.58	1.691
4.09	0.17103	0.5219	0.10111	12.72	1.691
4.1	0.17027	0.52139	0.10064	12.85	1.692
4.11	0.16951	0.5209	0.10018	12.99	1.692
4.12	0.16876	0.5204	0.099711	13.12	1.693
4.13	0.16802	0.51991	0.099249	13.26	1.693
4.14	0.16728	0.51942	0.098791	13.4	1.693
4.15	0.16654	0.51894	0.098336	13.54	1.694
4.16	0.16581	0.51845	0.097884	13.68	1.694
4.17	0.16508	0.51797	0.097435	13.83	1.694
4.18	0.16436	0.5175	0.096989	13.97	1.695
4.19	0.16364	0.51702	0.096546	14.12	1.695
4.2	0.16293	0.51655	0.096106	14.26	1.695
4.21	0.16222	0.51609	0.095669	14.41	1.696
4.22	0.16152	0.51562	0.095234	14.56	1.696
4.23	0.16082	0.51516	0.094803	14.72	1.696
4.24	0.16012	0.5147	0.094375	14.87	1.697
4.25	0.15943	0.51424	0.093949	15.03	1.697
4.26	0.15874	0.51379	0.093527	15.18	1.697
4.27	0.15806	0.51334	0.093107	15.34	1.698
4.28	0.15738	0.51289	0.09269	15.5	1.698
4.29	0.15671	0.51245	0.092276	15.66	1.698
4.3	0.15604	0.51201	0.091864	15.83	1.699
4.31	0.15537	0.51157	0.091455	15.99	1.699
4.32	0.15471	0.51113	0.091049	16.16	1.699
4.33	0.15405	0.51069	0.090646	16.32	1.7
4.34	0.1534	0.51026	0.090245	16.49	1.7

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
4.35	0.15275	0.50983	0.089846	16.66	1.7
4.36	0.1521	0.50941	0.089451	16.84	1.7
4.37	0.15146	0.50898	0.089058	17.01	1.701
4.38	0.15082	0.50856	0.088667	17.19	1.701
4.39	0.15019	0.50814	0.088279	17.37	1.701
4.4	0.14956	0.50773	0.087894	17.54	1.702
4.41	0.14894	0.50732	0.087511	17.73	1.702
4.42	0.14831	0.5069	0.08713	17.91	1.702
4.43	0.1477	0.5065	0.086752	18.09	1.702
4.44	0.14708	0.50609	0.086376	18.28	1.703
4.45	0.14647	0.50569	0.086003	18.47	1.703
4.46	0.14586	0.50528	0.085632	18.66	1.703
4.47	0.14526	0.50489	0.085264	18.85	1.704
4.48	0.14466	0.50449	0.084897	19.04	1.704
4.49	0.14406	0.5041	0.084534	19.24	1.704
4.5	0.14347	0.5037	0.084172	19.44	1.704
4.51	0.14288	0.50331	0.083813	19.64	1.705
4.52	0.14229	0.50293	0.083456	19.84	1.705
4.53	0.14171	0.50254	0.083101	20.04	1.705
4.54	0.14113	0.50216	0.082748	20.25	1.706
4.55	0.14056	0.50178	0.082398	20.45	1.706
4.56	0.13999	0.5014	0.08205	20.66	1.706
4.57	0.13942	0.50103	0.081704	20.87	1.706
4.58	0.13885	0.50065	0.08136	21.09	1.707
4.59	0.13829	0.50028	0.081019	21.3	1.707
4.6	0.13773	0.49991	0.080679	21.52	1.707
4.61	0.13718	0.49954	0.080342	21.74	1.707
4.62	0.13663	0.49918	0.080006	21.96	1.708
4.63	0.13608	0.49882	0.079673	22.18	1.708
4.64	0.13553	0.49845	0.079342	22.41	1.708
4.65	0.13499	0.4981	0.079013	22.63	1.708
4.66	0.13445	0.49774	0.078686	22.86	1.709
4.67	0.13391	0.49738	0.07836	23.09	1.709

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
4.68	0.13338	0.49703	0.078037	23.33	1.709
4.69	0.13285	0.49668	0.077716	23.56	1.709
4.7	0.13232	0.49633	0.077397	23.8	1.71
4.71	0.1318	0.49599	0.077079	24.04	1.71
4.72	0.13128	0.49564	0.076764	24.29	1.71
4.73	0.13076	0.4953	0.076451	24.53	1.71
4.74	0.13025	0.49496	0.076139	24.78	1.711
4.75	0.12974	0.49462	0.075829	25.03	1.711
4.76	0.12923	0.49428	0.075522	25.28	1.711
4.77	0.12872	0.49395	0.075216	25.53	1.711
4.78	0.12822	0.49362	0.074911	25.79	1.712
4.79	0.12772	0.49329	0.074609	26.05	1.712
4.8	0.12722	0.49296	0.074309	26.31	1.712
4.81	0.12673	0.49263	0.07401	26.57	1.712
4.82	0.12624	0.4923	0.073713	26.84	1.713
4.83	0.12575	0.49198	0.073418	27.11	1.713
4.84	0.12526	0.49166	0.073124	27.38	1.713
4.85	0.12478	0.49134	0.072833	27.65	1.713
4.86	0.1243	0.49102	0.072543	27.93	1.713
4.87	0.12382	0.4907	0.072254	28.21	1.714
4.88	0.12334	0.49039	0.071968	28.49	1.714
4.89	0.12287	0.49008	0.071683	28.77	1.714
4.9	0.1224	0.48976	0.0714	29.06	1.714
4.91	0.12193	0.48945	0.071118	29.34	1.715
4.92	0.12147	0.48915	0.070838	29.64	1.715
4.93	0.12101	0.48884	0.07056	29.93	1.715
4.94	0.12055	0.48854	0.070283	30.23	1.715
4.95	0.12009	0.48823	0.070008	30.53	1.715
4.96	0.11964	0.48793	0.069735	30.83	1.716
4.97	0.11918	0.48763	0.069463	31.13	1.716
4.98	0.11873	0.48734	0.069193	31.44	1.716
4.99	0.11829	0.48704	0.068924	31.75	1.716
5	0.11784	0.48675	0.068657	32.06	1.716

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
5.02	0.11696	0.48616	0.068127	32.7	1.717
5.04	0.11609	0.48558	0.067603	33.34	1.717
5.06	0.11523	0.48501	0.067085	34	1.718
5.08	0.11437	0.48445	0.066573	34.67	1.718
5.1	0.11353	0.48389	0.066067	35.35	1.718
5.12	0.1127	0.48333	0.065567	36.04	1.719
5.14	0.11187	0.48279	0.065072	36.75	1.719
5.16	0.11105	0.48225	0.064583	37.47	1.72
5.18	0.11025	0.48171	0.064099	38.2	1.72
5.2	0.10945	0.48118	0.06362	38.94	1.72
5.22	0.10865	0.48065	0.063147	39.7	1.721
5.24	0.10787	0.48014	0.062679	40.47	1.721
5.26	0.1071	0.47962	0.062216	41.25	1.721
5.28	0.10633	0.47911	0.061758	42.05	1.722
5.3	0.10557	0.47861	0.061306	42.86	1.722
5.32	0.10482	0.47811	0.060858	43.68	1.722
5.34	0.10408	0.47762	0.060415	44.52	1.723
5.36	0.10334	0.47713	0.059976	45.38	1.723
5.38	0.10262	0.47665	0.059543	46.25	1.723
5.4	0.1019	0.47617	0.059114	47.13	1.724
5.42	0.10119	0.4757	0.058689	48.03	1.724
5.44	0.10048	0.47523	0.05827	48.94	1.724
5.46	0.099783	0.47477	0.057854	49.87	1.725
5.48	0.099092	0.47431	0.057443	50.82	1.725
5.5	0.098408	0.47386	0.057037	51.78	1.725
5.52	0.097732	0.47341	0.056634	52.76	1.726
5.54	0.097062	0.47296	0.056236	53.75	1.726
5.56	0.096399	0.47252	0.055842	54.76	1.726
5.58	0.095742	0.47209	0.055452	55.79	1.727
5.6	0.095092	0.47166	0.055066	56.84	1.727
5.62	0.094449	0.47123	0.054684	57.9	1.727
5.64	0.093812	0.47081	0.054306	58.98	1.727
5.66	0.093181	0.47039	0.053932	60.08	1.728

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
5.68	0.092556	0.46997	0.053562	61.2	1.728
5.7	0.091938	0.46956	0.053195	62.34	1.728
5.72	0.091326	0.46916	0.052832	63.49	1.729
5.74	0.090719	0.46875	0.052473	64.66	1.729
5.76	0.090119	0.46835	0.052118	65.86	1.729
5.78	0.089524	0.46796	0.051766	67.07	1.729
5.8	0.088935	0.46757	0.051417	68.3	1.73
5.82	0.088352	0.46718	0.051072	69.56	1.73
5.84	0.087775	0.4668	0.050731	70.83	1.73
5.86	0.087203	0.46642	0.050393	72.13	1.73
5.88	0.086637	0.46604	0.050058	73.44	1.731
5.9	0.086076	0.46567	0.049727	74.78	1.731
5.92	0.08552	0.4653	0.049398	76.14	1.731
5.94	0.08497	0.46493	0.049073	77.52	1.731
5.96	0.084424	0.46457	0.048751	78.92	1.732
5.98	0.083884	0.46421	0.048433	80.35	1.732
6	0.083349	0.46386	0.048117	81.79	1.732
6.02	0.082819	0.46351	0.047805	83.27	1.732
6.04	0.082295	0.46316	0.047495	84.76	1.733
6.06	0.081774	0.46281	0.047189	86.28	1.733
6.08	0.081259	0.46247	0.046885	87.82	1.733
6.1	0.080749	0.46213	0.046584	89.39	1.733
6.12	0.080243	0.46179	0.046286	90.98	1.734
6.14	0.079742	0.46146	0.045991	92.6	1.734
6.16	0.079246	0.46113	0.045699	94.24	1.734
6.18	0.078754	0.4608	0.04541	95.91	1.734
6.2	0.078266	0.46048	0.045123	97.61	1.735
6.22	0.077784	0.46016	0.044839	99.33	1.735
6.24	0.077305	0.45984	0.044557	$1.0E+2$	1.735
6.26	0.076831	0.45952	0.044279	$1.0E+2$	1.735
6.28	0.076361	0.45921	0.044002	$1.0E+2$	1.735
6.3	0.075895	0.4589	0.043729	$1.1E+2$	1.736
6.32	0.075434	0.4586	0.043458	$1.1E+2$	1.736

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
6.34	0.074976	0.45829	0.043189	1.1E+2	1.736
6.36	0.074523	0.45799	0.042923	1.1E+2	1.736
6.38	0.074074	0.45769	0.042659	1.1E+2	1.736
6.4	0.073629	0.4574	0.042398	1.2E+2	1.737
6.42	0.073188	0.4571	0.042139	1.2E+2	1.737
6.44	0.07275	0.45681	0.041882	1.2E+2	1.737
6.46	0.072317	0.45652	0.041628	1.2E+2	1.737
6.48	0.071887	0.45624	0.041376	1.2E+2	1.737
6.5	0.071461	0.45595	0.041127	1.3E+2	1.738
6.52	0.071039	0.45567	0.040879	1.3E+2	1.738
6.54	0.070621	0.45539	0.040634	1.3E+2	1.738
6.56	0.070206	0.45512	0.040391	1.3E+2	1.738
6.58	0.069794	0.45484	0.04015	1.4E+2	1.738
6.6	0.069387	0.45457	0.039911	1.4E+2	1.739
6.62	0.068983	0.4543	0.039675	1.4E+2	1.739
6.64	0.068582	0.45404	0.03944	1.4E+2	1.739
6.66	0.068185	0.45377	0.039207	1.4E+2	1.739
6.68	0.067791	0.45351	0.038977	1.5E+2	1.739
6.7	0.0674	0.45325	0.038749	1.5E+2	1.739
6.72	0.067013	0.45299	0.038522	1.5E+2	1.74
6.74	0.066629	0.45274	0.038298	1.5E+2	1.74
6.76	0.066249	0.45249	0.038075	1.6E+2	1.74
6.78	0.065871	0.45223	0.037855	1.6E+2	1.74
6.8	0.065497	0.45199	0.037636	1.6E+2	1.74
6.82	0.065126	0.45174	0.037419	1.7E+2	1.74
6.84	0.064758	0.45149	0.037204	1.7E+2	1.741
6.86	0.064393	0.45125	0.036991	1.7E+2	1.741
6.88	0.064031	0.45101	0.03678	1.7E+2	1.741
6.9	0.063672	0.45077	0.03657	1.8E+2	1.741
6.92	0.063316	0.45053	0.036362	1.8E+2	1.741
6.94	0.062963	0.4503	0.036156	1.8E+2	1.741
6.96	0.062613	0.45007	0.035952	1.9E+2	1.742
6.98	0.062266	0.44983	0.03575	1.9E+2	1.742

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
7	0.061922	0.44961	0.035549	1.9E+2	1.742
7.02	0.06158	0.44938	0.03535	1.9E+2	1.742
7.04	0.061242	0.44915	0.035152	2.0E+2	1.742
7.06	0.060906	0.44893	0.034956	2.0E+2	1.742
7.08	0.060572	0.44871	0.034762	2.0E+2	1.742
7.1	0.060242	0.44849	0.034569	2.1E+2	1.743
7.12	0.059914	0.44827	0.034378	2.1E+2	1.743
7.14	0.059589	0.44805	0.034189	2.1E+2	1.743
7.16	0.059266	0.44784	0.034001	2.2E+2	1.743
7.18	0.058946	0.44762	0.033815	2.2E+2	1.743
7.2	0.058629	0.44741	0.03363	2.2E+2	1.743
7.22	0.058314	0.4472	0.033446	2.3E+2	1.744
7.24	0.058001	0.447	0.033264	2.3E+2	1.744
7.26	0.057691	0.44679	0.033084	2.4E+2	1.744
7.28	0.057384	0.44658	0.032905	2.4E+2	1.744
7.3	0.057079	0.44638	0.032728	2.4E+2	1.744
7.32	0.056776	0.44618	0.032552	2.5E+2	1.744
7.34	0.056476	0.44598	0.032377	2.5E+2	1.744
7.36	0.056178	0.44578	0.032204	2.5E+2	1.744
7.38	0.055882	0.44558	0.032032	2.6E+2	1.745
7.4	0.055589	0.44539	0.031861	2.6E+2	1.745
7.42	0.055298	0.4452	0.031692	2.7E+2	1.745
7.44	0.055009	0.445	0.031524	2.7E+2	1.745
7.46	0.054723	0.44481	0.031358	2.8E+2	1.745
7.48	0.054438	0.44462	0.031193	2.8E+2	1.745
7.5	0.054156	0.44443	0.031029	2.8E+2	1.745
7.52	0.053876	0.44425	0.030866	2.9E+2	1.745
7.54	0.053598	0.44406	0.030705	2.9E+2	1.746
7.56	0.053323	0.44388	0.030545	3.0E+2	1.746
7.58	0.053049	0.4437	0.030386	3.0E+2	1.746
7.6	0.052778	0.44352	0.030228	3.1E+2	1.746
7.62	0.052508	0.44334	0.030072	3.1E+2	1.746
7.64	0.052241	0.44316	0.029917	3.2E+2	1.746

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
7.66	0.051975	0.44298	0.029763	3.2E+2	1.746
7.68	0.051712	0.44281	0.02961	3.3E+2	1.746
7.7	0.051451	0.44263	0.029458	3.3E+2	1.747
7.72	0.051191	0.44246	0.029308	3.4E+2	1.747
7.74	0.050934	0.44229	0.029158	3.4E+2	1.747
7.76	0.050678	0.44212	0.02901	3.5E+2	1.747
7.78	0.050424	0.44195	0.028863	3.5E+2	1.747
7.8	0.050173	0.44178	0.028717	3.6E+2	1.747
7.82	0.049923	0.44161	0.028572	3.6E+2	1.747
7.84	0.049675	0.44145	0.028428	3.7E+2	1.747
7.86	0.049428	0.44128	0.028286	3.7E+2	1.747
7.88	0.049184	0.44112	0.028144	3.8E+2	1.748
7.9	0.048941	0.44096	0.028003	3.8E+2	1.748
7.92	0.0487	0.4408	0.027864	3.9E+2	1.748
7.94	0.048461	0.44064	0.027725	4.0E+2	1.748
7.96	0.048224	0.44048	0.027588	4.0E+2	1.748
7.98	0.047988	0.44032	0.027451	4.1E+2	1.748
8	0.047754	0.44017	0.027316	4.1E+2	1.748
8.02	0.047522	0.44001	0.027181	4.2E+2	1.748
8.04	0.047291	0.43986	0.027048	4.3E+2	1.748
8.06	0.047062	0.43971	0.026915	4.3E+2	1.749
8.08	0.046835	0.43956	0.026784	4.4E+2	1.749
8.1	0.04661	0.43941	0.026653	4.4E+2	1.749
8.12	0.046385	0.43926	0.026524	4.5E+2	1.749
8.14	0.046163	0.43911	0.026395	4.6E+2	1.749
8.16	0.045942	0.43896	0.026267	4.6E+2	1.749
8.18	0.045723	0.43882	0.02614	4.7E+2	1.749
8.2	0.045505	0.43867	0.026015	4.8E+2	1.749
8.22	0.045289	0.43853	0.02589	4.9E+2	1.749
8.24	0.045074	0.43838	0.025765	4.9E+2	1.749
8.26	0.044861	0.43824	0.025642	5.0E+2	1.75
8.28	0.04465	0.4381	0.02552	5.1E+2	1.75
8.3	0.044439	0.43796	0.025398	5.1E+2	1.75

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
8.32	0.044231	0.43782	0.025278	5.2E+2	1.75
8.34	0.044023	0.43768	0.025158	5.3E+2	1.75
8.36	0.043818	0.43755	0.025039	5.4E+2	1.75
8.38	0.043613	0.43741	0.024921	5.4E+2	1.75
8.4	0.04341	0.43727	0.024804	5.5E+2	1.75
8.42	0.043209	0.43714	0.024687	5.6E+2	1.75
8.44	0.043009	0.43701	0.024572	5.7E+2	1.75
8.46	0.04281	0.43687	0.024457	5.8E+2	1.75
8.48	0.042612	0.43674	0.024343	5.8E+2	1.751
8.5	0.042416	0.43661	0.02423	5.9E+2	1.751
8.52	0.042222	0.43648	0.024117	6.0E+2	1.751
8.54	0.042028	0.43635	0.024006	6.1E+2	1.751
8.56	0.041836	0.43622	0.023895	6.2E+2	1.751
8.58	0.041645	0.4361	0.023785	6.3E+2	1.751
8.6	0.041456	0.43597	0.023675	6.3E+2	1.751
8.62	0.041268	0.43584	0.023567	6.4E+2	1.751
8.64	0.041081	0.43572	0.023459	6.5E+2	1.751
8.66	0.040895	0.4356	0.023352	6.6E+2	1.751
8.68	0.04071	0.43547	0.023245	6.7E+2	1.751
8.7	0.040527	0.43535	0.02314	6.8E+2	1.751
8.72	0.040345	0.43523	0.023035	6.9E+2	1.752
8.74	0.040165	0.43511	0.02293	7.0E+2	1.752
8.76	0.039985	0.43499	0.022827	7.1E+2	1.752
8.78	0.039807	0.43487	0.022724	7.2E+2	1.752
8.8	0.039629	0.43475	0.022622	7.3E+2	1.752
8.82	0.039453	0.43464	0.02252	7.4E+2	1.752
8.84	0.039279	0.43452	0.022419	7.5E+2	1.752
8.86	0.039105	0.4344	0.022319	7.6E+2	1.752
8.88	0.038932	0.43429	0.02222	7.7E+2	1.752
8.9	0.038761	0.43417	0.022121	7.8E+2	1.752
8.92	0.038591	0.43406	0.022023	7.9E+2	1.752
8.94	0.038421	0.43395	0.021926	8.0E+2	1.752
8.96	0.038253	0.43383	0.021829	8.1E+2	1.752

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
8.98	0.038086	0.43372	0.021732	8.2E+2	1.753
9	0.037921	0.43361	0.021637	8.3E+2	1.753
9.02	0.037756	0.4335	0.021542	8.4E+2	1.753
9.04	0.037592	0.43339	0.021448	8.6E+2	1.753
9.06	0.037429	0.43329	0.021354	8.7E+2	1.753
9.08	0.037268	0.43318	0.021261	8.8E+2	1.753
9.1	0.037107	0.43307	0.021168	8.9E+2	1.753
9.12	0.036947	0.43296	0.021076	9.0E+2	1.753
9.14	0.036789	0.43286	0.020985	9.1E+2	1.753
9.16	0.036631	0.43275	0.020894	9.3E+2	1.753
9.18	0.036475	0.43265	0.020804	9.4E+2	1.753
9.2	0.036319	0.43254	0.020715	9.5E+2	1.753
9.22	0.036165	0.43244	0.020626	9.6E+2	1.753
9.24	0.036011	0.43234	0.020537	9.8E+2	1.753
9.26	0.035858	0.43224	0.02045	9.9E+2	1.754
9.28	0.035707	0.43214	0.020362	1.0E+3	1.754
9.3	0.035556	0.43204	0.020276	1.0E+3	1.754
9.32	0.035406	0.43194	0.020189	1.0E+3	1.754
9.34	0.035257	0.43184	0.020104	1.0E+3	1.754
9.36	0.035109	0.43174	0.020019	1.1E+3	1.754
9.38	0.034962	0.43164	0.019934	1.1E+3	1.754
9.4	0.034816	0.43154	0.01985	1.1E+3	1.754
9.42	0.034671	0.43145	0.019767	1.1E+3	1.754
9.44	0.034527	0.43135	0.019684	1.1E+3	1.754
9.46	0.034384	0.43125	0.019601	1.1E+3	1.754
9.48	0.034241	0.43116	0.019519	1.1E+3	1.754
9.5	0.0341	0.43106	0.019438	1.2E+3	1.754
9.52	0.033959	0.43097	0.019357	1.2E+3	1.754
9.54	0.033819	0.43088	0.019277	1.2E+3	1.754
9.56	0.03368	0.43078	0.019197	1.2E+3	1.754
9.58	0.033542	0.43069	0.019117	1.2E+3	1.755
9.6	0.033405	0.4306	0.019038	1.2E+3	1.755
9.62	0.033268	0.43051	0.01896	1.2E+3	1.755

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
9.64	0.033133	0.43042	0.018882	1.3E+3	1.755
9.66	0.032998	0.43033	0.018805	1.3E+3	1.755
9.68	0.032864	0.43024	0.018728	1.3E+3	1.755
9.7	0.032731	0.43015	0.018651	1.3E+3	1.755
9.72	0.032598	0.43006	0.018575	1.3E+3	1.755
9.74	0.032467	0.42997	0.018499	1.3E+3	1.755
9.76	0.032336	0.42989	0.018424	1.4E+3	1.755
9.78	0.032206	0.4298	0.01835	1.4E+3	1.755
9.8	0.032077	0.42971	0.018275	1.4E+3	1.755
9.82	0.031948	0.42963	0.018202	1.4E+3	1.755
9.84	0.03182	0.42954	0.018128	1.4E+3	1.755
9.86	0.031693	0.42946	0.018055	1.5E+3	1.755
9.88	0.031567	0.42937	0.017983	1.5E+3	1.755
9.9	0.031442	0.42929	0.017911	1.5E+3	1.755
9.92	0.031317	0.42921	0.017839	1.5E+3	1.756
9.94	0.031193	0.42912	0.017768	1.5E+3	1.756
9.96	0.03107	0.42904	0.017697	1.5E+3	1.756
9.98	0.030947	0.42896	0.017627	1.6E+3	1.756
1	0.030826	0.42888	0.017557	1.6E+3	1.756
10.1	0.030227	0.42848	0.017214	1.7E+3	1.756
10.2	0.029646	0.42809	0.01688	1.8E+3	1.756
10.3	0.029082	0.42772	0.016557	1.9E+3	1.756
10.4	0.028533	0.42735	0.016242	2.0E+3	1.757
10.5	0.028	0.42699	0.015936	2.1E+3	1.757
10.6	0.027481	0.42665	0.015639	2.3E+3	1.757
10.7	0.026976	0.42631	0.01535	2.4E+3	1.757
10.8	0.026486	0.42598	0.015069	2.5E+3	1.758
10.9	0.026008	0.42566	0.014795	2.7E+3	1.758
11	0.025543	0.42535	0.014529	2.9E+3	1.758
11.1	0.025091	0.42505	0.01427	3.0E+3	1.758
11.2	0.02465	0.42476	0.014018	3.2E+3	1.758
11.3	0.024221	0.42447	0.013773	3.4E+3	1.759
11.4	0.023803	0.42419	0.013534	3.6E+3	1.759

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
11.5	0.023396	0.42392	0.013301	3.8E+3	1.759
11.6	0.022999	0.42365	0.013074	4.0E+3	1.759
11.7	0.022612	0.4234	0.012852	4.2E+3	1.759
11.8	0.022234	0.42314	0.012637	4.4E+3	1.76
11.9	0.021866	0.4229	0.012426	4.7E+3	1.76
12	0.021507	0.42266	0.012221	4.9E+3	1.76
12.1	0.021157	0.42242	0.012021	5.2E+3	1.76
12.2	0.020815	0.4222	0.011826	5.5E+3	1.76
12.3	0.020481	0.42197	0.011635	5.7E+3	1.76
12.4	0.020155	0.42176	0.011449	6.0E+3	1.76
12.5	0.019837	0.42154	0.011268	6.4E+3	1.761
12.6	0.019527	0.42134	0.01109	6.7E+3	1.761
12.7	0.019223	0.42113	0.010917	7.0E+3	1.761
12.8	0.018927	0.42094	0.010748	7.4E+3	1.761
12.9	0.018637	0.42074	0.010583	7.8E+3	1.761
13	0.018354	0.42055	0.010421	8.2E+3	1.761
13.1	0.018078	0.42037	0.010264	8.6E+3	1.761
13.2	0.017807	0.42019	0.010109	9.0E+3	1.761
13.3	0.017543	0.42001	0.00996	9.4E+3	1.762
13.4	0.017284	0.41984	0.00981	9.9E+3	1.762
13.5	0.017031	0.41967	0.00967	1.0E+4	1.762
13.6	0.016784	0.4195	0.00953	1.1E+4	1.762
13.7	0.016542	0.41934	0.00939	1.1E+4	1.762
13.8	0.016305	0.41918	0.00925	1.2E+4	1.762
13.9	0.016073	0.41903	0.00912	1.2E+4	1.762
14	0.015846	0.41888	0.00899	1.3E+4	1.762
14.1	0.015623	0.41873	0.00886	1.4E+4	1.762
14.2	0.015406	0.41858	0.00874	1.4E+4	1.763
14.3	0.015193	0.41844	0.00862	1.5E+4	1.763
14.4	0.014984	0.4183	0.0085	1.6E+4	1.763
14.5	0.01478	0.41816	0.00838	1.6E+4	1.763
14.6	0.014579	0.41803	0.00827	1.7E+4	1.763
14.7	0.014383	0.4179	0.00816	1.8E+4	1.763

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
14.8	0.014191	0.41777	0.00805	1.9E+4	1.763
14.9	0.014002	0.41765	0.00794	1.9E+4	1.763
15	0.013817	0.41752	0.00784	2.0E+4	1.763
15.1	0.013636	0.4174	0.00773	2.1E+4	1.763
15.2	0.013458	0.41728	0.00763	2.2E+4	1.763
15.3	0.013284	0.41717	0.00753	2.3E+4	1.763
15.4	0.013113	0.41705	0.00744	2.4E+4	1.764
15.5	0.012946	0.41694	0.00734	2.5E+4	1.764
15.6	0.012781	0.41683	0.00725	2.6E+4	1.764
15.7	0.01262	0.41672	0.00716	2.7E+4	1.764
15.8	0.012462	0.41662	0.00707	2.8E+4	1.764
15.9	0.012307	0.41651	0.00698	3.0E+4	1.764
16	0.012154	0.41641	0.00689	3.1E+4	1.764
16.1	0.012004	0.41631	0.00681	3.2E+4	1.764
16.2	0.011858	0.41621	0.00672	3.3E+4	1.764
16.3	0.011713	0.41612	0.00664	3.5E+4	1.764
16.4	0.011572	0.41602	0.00656	3.6E+4	1.764
16.5	0.011433	0.41593	0.00648	3.8E+4	1.764
16.6	0.011296	0.41584	0.0064	3.9E+4	1.764
16.7	0.011162	0.41575	0.00633	4.1E+4	1.764
16.8	0.01103	0.41566	0.00625	4.2E+4	1.764
16.9	0.010901	0.41557	0.00618	4.4E+4	1.764
17	0.010774	0.41549	0.00611	4.6E+4	1.765
17.1	0.010649	0.4154	0.00603	4.7E+4	1.765
17.2	0.010526	0.41532	0.00596	4.9E+4	1.765
17.3	0.010405	0.41524	0.0059	5.1E+4	1.765
17.4	0.010286	0.41516	0.00583	5.3E+4	1.765
17.5	0.01017	0.41508	0.00576	5.5E+4	1.765
17.6	0.010055	0.41501	0.0057	5.7E+4	1.765
17.7	0.00994	0.41493	0.00563	5.9E+4	1.765
17.8	0.00983	0.41486	0.00557	6.1E+4	1.765
17.9	0.00972	0.41479	0.00551	6.4E+4	1.765
18	0.00962	0.41471	0.00545	6.6E+4	1.765

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
18.1	0.00951	0.41464	0.00539	6.9E+4	1.765
18.2	0.00941	0.41457	0.00533	7.1E+4	1.765
18.3	0.0093	0.41451	0.00527	7.4E+4	1.765
18.4	0.0092	0.41444	0.00521	7.6E+4	1.765
18.5	0.0091	0.41437	0.00516	7.9E+4	1.765
18.6	0.00901	0.41431	0.0051	8.2E+4	1.765
18.7	0.00891	0.41424	0.00505	8.5E+4	1.765
18.8	0.00882	0.41418	0.00499	8.8E+4	1.765
18.9	0.00873	0.41412	0.00494	9.1E+4	1.765
19	0.00863	0.41406	0.00489	9.4E+4	1.765
19.1	0.00854	0.414	0.00484	9.7E+4	1.766
19.2	0.00846	0.41394	0.00479	1.0E+5	1.766
19.3	0.00837	0.41388	0.00474	1.0E+5	1.766
19.4	0.00828	0.41382	0.00469	1.1E+5	1.766
19.5	0.0082	0.41377	0.00464	1.1E+5	1.766
19.6	0.00812	0.41371	0.0046	1.2E+5	1.766
19.7	0.00803	0.41366	0.00455	1.2E+5	1.766
19.8	0.00795	0.4136	0.0045	1.2E+5	1.766
19.9	0.00787	0.41355	0.00446	1.3E+5	1.766
2	0.0078	0.4135	0.00441	1.3E+5	1.766
20.1	0.00772	0.41345	0.00437	1.4E+5	1.766
20.2	0.00764	0.41339	0.00433	1.4E+5	1.766
20.3	0.00757	0.41334	0.00429	1.4E+5	1.766
20.4	0.00749	0.4133	0.00424	1.5E+5	1.766
20.5	0.00742	0.41325	0.0042	1.5E+5	1.766
20.6	0.00735	0.4132	0.00416	1.6E+5	1.766
20.7	0.00728	0.41315	0.00412	1.6E+5	1.766
20.8	0.00721	0.41311	0.00408	1.7E+5	1.766
20.9	0.00714	0.41306	0.00404	1.8E+5	1.766
21	0.00707	0.41301	0.004	1.8E+5	1.766
21.1	0.00701	0.41297	0.00397	1.9E+5	1.766
21.2	0.00694	0.41293	0.00393	1.9E+5	1.766
21.3	0.00688	0.41288	0.00389	2.0E+5	1.766

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
21.4	0.00681	0.41284	0.00386	2.0E+5	1.766
21.5	0.00675	0.4128	0.00382	2.1E+5	1.766
21.6	0.00669	0.41276	0.00379	2.2E+5	1.766
21.7	0.00663	0.41271	0.00375	2.2E+5	1.766
21.8	0.00657	0.41267	0.00372	2.3E+5	1.766
21.9	0.00651	0.41263	0.00368	2.4E+5	1.766
22	0.00645	0.4126	0.00365	2.4E+5	1.766
22.1	0.00639	0.41256	0.00362	2.5E+5	1.766
22.2	0.00633	0.41252	0.00358	2.6E+5	1.766
22.3	0.00628	0.41248	0.00355	2.7E+5	1.766
22.4	0.00622	0.41244	0.00352	2.8E+5	1.767
22.5	0.00616	0.41241	0.00349	2.8E+5	1.767
22.6	0.00611	0.41237	0.00346	2.9E+5	1.767
22.7	0.00606	0.41233	0.00343	3.0E+5	1.767
22.8	0.006	0.4123	0.0034	3.1E+5	1.767
22.9	0.00595	0.41226	0.00337	3.2E+5	1.767
23	0.0059	0.41223	0.00334	3.3E+5	1.767
23.1	0.00585	0.4122	0.00331	3.4E+5	1.767
23.2	0.0058	0.41216	0.00328	3.5E+5	1.767
23.3	0.00575	0.41213	0.00325	3.6E+5	1.767
23.4	0.0057	0.4121	0.00323	3.7E+5	1.767
23.5	0.00565	0.41206	0.0032	3.8E+5	1.767
23.6	0.0056	0.41203	0.00317	3.9E+5	1.767
23.7	0.00556	0.412	0.00315	4.0E+5	1.767
23.8	0.00551	0.41197	0.00312	4.1E+5	1.767
23.9	0.00547	0.41194	0.00309	4.2E+5	1.767
24	0.00542	0.41191	0.00307	4.3E+5	1.767
24.1	0.00538	0.41188	0.00304	4.5E+5	1.767
24.2	0.00533	0.41185	0.00302	4.6E+5	1.767
24.3	0.00529	0.41182	0.00299	4.7E+5	1.767
24.4	0.00524	0.41179	0.00297	4.8E+5	1.767
24.5	0.0052	0.41176	0.00294	5.0E+5	1.767
24.6	0.00516	0.41173	0.00292	5.1E+5	1.767

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
24.7	0.00512	0.41171	0.0029	5.2E+5	1.767
24.8	0.00508	0.41168	0.00287	5.4E+5	1.767
24.9	0.00504	0.41165	0.00285	5.5E+5	1.767
25	0.005	0.41163	0.00283	5.7E+5	1.767
25.1	0.00496	0.4116	0.0028	5.8E+5	1.767
25.2	0.00492	0.41157	0.00278	6.0E+5	1.767
25.3	0.00488	0.41155	0.00276	6.1E+5	1.767
25.4	0.00484	0.41152	0.00274	6.3E+5	1.767
25.5	0.0048	0.4115	0.00272	6.5E+5	1.767
25.6	0.00477	0.41147	0.0027	6.6E+5	1.767
25.7	0.00473	0.41145	0.00268	6.8E+5	1.767
25.8	0.00469	0.41142	0.00265	7.0E+5	1.767
25.9	0.00466	0.4114	0.00263	7.2E+5	1.767
26	0.00462	0.41137	0.00261	7.3E+5	1.767
26.1	0.00458	0.41135	0.00259	7.5E+5	1.767
26.2	0.00455	0.41133	0.00257	7.7E+5	1.767
26.3	0.00452	0.4113	0.00255	7.9E+5	1.767
26.4	0.00448	0.41128	0.00254	8.1E+5	1.767
26.5	0.00445	0.41126	0.00252	8.3E+5	1.767
26.6	0.00441	0.41124	0.0025	8.5E+5	1.767
26.7	0.00438	0.41121	0.00248	8.7E+5	1.767
26.8	0.00435	0.41119	0.00246	9.0E+5	1.767
26.9	0.00432	0.41117	0.00244	9.2E+5	1.767
27	0.00428	0.41115	0.00242	9.4E+5	1.767
27.1	0.00425	0.41113	0.00241	9.6E+5	1.767
27.2	0.00422	0.41111	0.00239	9.9E+5	1.767
27.3	0.00419	0.41109	0.00237	1.0E+6	1.767
27.4	0.00416	0.41107	0.00235	1.0E+6	1.767
27.5	0.00413	0.41105	0.00234	1.1E+6	1.767
27.6	0.0041	0.41103	0.00232	1.1E+6	1.767
27.7	0.00407	0.41101	0.0023	1.1E+6	1.767
27.8	0.00404	0.41099	0.00229	1.1E+6	1.767
27.9	0.00401	0.41097	0.00227	1.2E+6	1.767

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
28	0.00398	0.41095	0.00225	1.2E+6	1.767
28.1	0.00396	0.41093	0.00224	1.2E+6	1.768
28.2	0.00393	0.41091	0.00222	1.3E+6	1.768
28.3	0.0039	0.41089	0.00221	1.3E+6	1.768
28.4	0.00387	0.41087	0.00219	1.3E+6	1.768
28.5	0.00385	0.41086	0.00218	1.3E+6	1.768
28.6	0.00382	0.41084	0.00216	1.4E+6	1.768
28.7	0.00379	0.41082	0.00215	1.4E+6	1.768
28.8	0.00377	0.4108	0.00213	1.4E+6	1.768
28.9	0.00374	0.41079	0.00212	1.5E+6	1.768
29	0.00372	0.41077	0.0021	1.5E+6	1.768
29.1	0.00369	0.41075	0.00209	1.5E+6	1.768
29.2	0.00366	0.41073	0.00207	1.6E+6	1.768
29.3	0.00364	0.41072	0.00206	1.6E+6	1.768
29.4	0.00361	0.4107	0.00205	1.7E+6	1.768
29.5	0.00359	0.41069	0.00203	1.7E+6	1.768
29.6	0.00357	0.41067	0.00202	1.7E+6	1.768
29.7	0.00354	0.41065	0.002	1.8E+6	1.768
29.8	0.00352	0.41064	0.00199	1.8E+6	1.768
29.9	0.0035	0.41062	0.00198	1.8E+6	1.768
3	0.00347	0.41061	0.00196	1.9E+6	1.768
30.1	0.00345	0.41059	0.00195	1.9E+6	1.768
30.2	0.00343	0.41058	0.00194	2.0E+6	1.768
30.3	0.0034	0.41056	0.00193	2.0E+6	1.768
30.4	0.00338	0.41055	0.00191	2.1E+6	1.768
30.5	0.00336	0.41053	0.0019	2.1E+6	1.768
30.6	0.00334	0.41052	0.00189	2.1E+6	1.768
30.7	0.00332	0.4105	0.00188	2.2E+6	1.768
30.8	0.00329	0.41049	0.00186	2.2E+6	1.768
30.9	0.00327	0.41047	0.00185	2.3E+6	1.768
31	0.00325	0.41046	0.00184	2.3E+6	1.768
31.1	0.00323	0.41045	0.00183	2.4E+6	1.768
31.2	0.00321	0.41043	0.00182	2.4E+6	1.768

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
31.3	0.00319	0.41042	0.0018	2.5E+6	1.768
31.4	0.00317	0.4104	0.00179	2.5E+6	1.768
31.5	0.00315	0.41039	0.00178	2.6E+6	1.768
31.6	0.00313	0.41038	0.00177	2.7E+6	1.768
31.7	0.00311	0.41036	0.00176	2.7E+6	1.768
31.8	0.00309	0.41035	0.00175	2.8E+6	1.768
31.9	0.00307	0.41034	0.00174	2.8E+6	1.768
32	0.00305	0.41033	0.00173	2.9E+6	1.768
32.1	0.00303	0.41031	0.00172	2.9E+6	1.768
32.2	0.00301	0.4103	0.00171	3.0E+6	1.768
32.3	0.003	0.41029	0.00169	3.1E+6	1.768
32.4	0.00298	0.41028	0.00168	3.1E+6	1.768
32.5	0.00296	0.41026	0.00167	3.2E+6	1.768
32.6	0.00294	0.41025	0.00166	3.3E+6	1.768
32.7	0.00292	0.41024	0.00165	3.3E+6	1.768
32.8	0.00291	0.41023	0.00164	3.4E+6	1.768
32.9	0.00289	0.41022	0.00163	3.5E+6	1.768
33	0.00287	0.4102	0.00162	3.5E+6	1.768
33.1	0.00285	0.41019	0.00161	3.6E+6	1.768
33.2	0.00284	0.41018	0.0016	3.7E+6	1.768
33.3	0.00282	0.41017	0.00159	3.8E+6	1.768
33.4	0.0028	0.41016	0.00158	3.8E+6	1.768
33.5	0.00279	0.41015	0.00158	3.9E+6	1.768
33.6	0.00277	0.41014	0.00157	4.0E+6	1.768
33.7	0.00275	0.41012	0.00156	4.1E+6	1.768
33.8	0.00274	0.41011	0.00155	4.1E+6	1.768
33.9	0.00272	0.4101	0.00154	4.2E+6	1.768
34	0.0027	0.41009	0.00153	4.3E+6	1.768
34.1	0.00269	0.41008	0.00152	4.4E+6	1.768
34.2	0.00267	0.41007	0.00151	4.5E+6	1.768
34.3	0.00266	0.41006	0.0015	4.6E+6	1.768
34.4	0.00264	0.41005	0.00149	4.7E+6	1.768
34.5	0.00263	0.41004	0.00149	4.8E+6	1.768

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
34.6	0.00261	0.41003	0.00148	4.8E+6	1.768
34.7	0.0026	0.41002	0.00147	4.9E+6	1.768
34.8	0.00258	0.41001	0.00146	5.0E+6	1.768
34.9	0.00257	0.41	0.00145	5.1E+6	1.768
35	0.00255	0.40999	0.00144	5.2E+6	1.768
35.1	0.00254	0.40998	0.00144	5.3E+6	1.768
35.2	0.00252	0.40997	0.00143	5.4E+6	1.768
35.3	0.00251	0.40996	0.00142	5.5E+6	1.768
35.4	0.00249	0.40995	0.00141	5.6E+6	1.768
35.5	0.00248	0.40994	0.0014	5.7E+6	1.768
35.6	0.00247	0.40993	0.0014	5.8E+6	1.768
35.7	0.00245	0.40992	0.00139	6.0E+6	1.768
35.8	0.00244	0.40992	0.00138	6.1E+6	1.768
35.9	0.00243	0.40991	0.00137	6.2E+6	1.768
36	0.00241	0.4099	0.00136	6.3E+6	1.768
36.1	0.0024	0.40989	0.00136	6.4E+6	1.768
36.2	0.00239	0.40988	0.00135	6.5E+6	1.768
36.3	0.00237	0.40987	0.00134	6.7E+6	1.768
36.4	0.00236	0.40986	0.00133	6.8E+6	1.768
36.5	0.00235	0.40985	0.00133	6.9E+6	1.768
36.6	0.00233	0.40985	0.00132	7.0E+6	1.768
36.7	0.00232	0.40984	0.00131	7.2E+6	1.768
36.8	0.00231	0.40983	0.00131	7.3E+6	1.768
36.9	0.0023	0.40982	0.0013	7.4E+6	1.768
37	0.00228	0.40981	0.00129	7.6E+6	1.768
37.1	0.00227	0.4098	0.00128	7.7E+6	1.768
37.2	0.00226	0.4098	0.00128	7.8E+6	1.768
37.3	0.00225	0.40979	0.00127	8.0E+6	1.768
37.4	0.00224	0.40978	0.00126	8.1E+6	1.768
37.5	0.00222	0.40977	0.00126	8.3E+6	1.768
37.6	0.00221	0.40976	0.00125	8.4E+6	1.768
37.7	0.0022	0.40976	0.00124	8.6E+6	1.768
37.8	0.00219	0.40975	0.00124	8.7E+6	1.768

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
37.9	0.00218	0.40974	0.00123	8.9E+6	1.768
38	0.00217	0.40973	0.00122	9.0E+6	1.768
38.1	0.00215	0.40972	0.00122	9.2E+6	1.768
38.2	0.00214	0.40972	0.00121	9.3E+6	1.768
38.3	0.00213	0.40971	0.00121	9.5E+6	1.768
38.4	0.00212	0.4097	0.0012	9.7E+6	1.768
38.5	0.00211	0.4097	0.00119	9.8E+6	1.768
38.6	0.0021	0.40969	0.00119	1.0E+7	1.768
38.7	0.00209	0.40968	0.00118	1.0E+7	1.768
38.8	0.00208	0.40967	0.00117	1.0E+7	1.768
38.9	0.00207	0.40967	0.00117	1.1E+7	1.768
39	0.00206	0.40966	0.00116	1.1E+7	1.768
39.1	0.00205	0.40965	0.00116	1.1E+7	1.768
39.2	0.00203	0.40965	0.00115	1.1E+7	1.768
39.3	0.00202	0.40964	0.00114	1.1E+7	1.768
39.4	0.00201	0.40963	0.00114	1.1E+7	1.768
39.5	0.002	0.40962	0.00113	1.2E+7	1.768
39.6	0.00199	0.40962	0.00113	1.2E+7	1.768
39.7	0.00198	0.40961	0.00112	1.2E+7	1.768
39.8	0.00197	0.4096	0.00112	1.2E+7	1.768
39.9	0.00196	0.4096	0.00111	1.2E+7	1.768
4	0.00195	0.40959	0.00111	1.3E+7	1.768
40.1	0.00194	0.40958	0.0011	1.3E+7	1.768
40.2	0.00194	0.40958	0.00109	1.3E+7	1.768
40.3	0.00193	0.40957	0.00109	1.3E+7	1.768
40.4	0.00192	0.40957	0.00108	1.4E+7	1.768
40.5	0.00191	0.40956	0.00108	1.4E+7	1.768
40.6	0.0019	0.40955	0.00107	1.4E+7	1.768
40.7	0.00189	0.40955	0.00107	1.4E+7	1.768
40.8	0.00188	0.40954	0.00106	1.4E+7	1.768
40.9	0.00187	0.40953	0.00106	1.5E+7	1.768
41	0.00186	0.40953	0.00105	1.5E+7	1.768
41.1	0.00185	0.40952	0.00105	1.5E+7	1.768

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
41.2	0.00184	0.40952	0.00104	$1.5E{+}7$	1.768
41.3	0.00183	0.40951	0.00104	$1.6E{+}7$	1.768
41.4	0.00182	0.4095	0.00103	$1.6E{+}7$	1.768
41.5	0.00182	0.4095	0.00103	$1.6E{+}7$	1.768
41.6	0.00181	0.40949	0.00102	$1.6E{+}7$	1.768
41.7	0.0018	0.40949	0.00102	$1.7E{+}7$	1.768
41.8	0.00179	0.40948	0.00101	$1.7E{+}7$	1.768
41.9	0.00178	0.40948	0.00101	$1.7E{+}7$	1.768
42	0.00177	0.40947	0.001	$1.8E{+}7$	1.768
42.1	0.00176	0.40946	0.000998	$1.8E{+}7$	1.768
42.2	0.00176	0.40946	0.000993	$1.8E{+}7$	1.768
42.3	0.00175	0.40945	0.000988	$1.8E{+}7$	1.768
42.4	0.00174	0.40945	0.000984	$1.9E{+}7$	1.768
42.5	0.00173	0.40944	0.000979	$1.9E{+}7$	1.768
42.6	0.00172	0.40944	0.000974	$1.9E{+}7$	1.768
42.7	0.00172	0.40943	0.00097	$2.0E{+}7$	1.768
42.8	0.00171	0.40943	0.000965	$2.0E{+}7$	1.768
42.9	0.0017	0.40942	0.000961	$2.0E{+}7$	1.768
43	0.00169	0.40942	0.000956	$2.0E{+}7$	1.768
43.1	0.00168	0.40941	0.000952	$2.1E{+}7$	1.768
43.2	0.00168	0.4094	0.000948	$2.1E{+}7$	1.769
43.3	0.00167	0.4094	0.000943	$2.1E{+}7$	1.769
43.4	0.00166	0.40939	0.000939	$2.2E{+}7$	1.769
43.5	0.00165	0.40939	0.000935	$2.2E{+}7$	1.769
43.6	0.00165	0.40938	0.00093	$2.2E{+}7$	1.769
43.7	0.00164	0.40938	0.000926	$2.3E{+}7$	1.769
43.8	0.00163	0.40937	0.000922	$2.3E{+}7$	1.769
43.9	0.00162	0.40937	0.000918	$2.3E{+}7$	1.769
44	0.00162	0.40936	0.000913	$2.4E{+}7$	1.769
44.1	0.00161	0.40936	0.000909	$2.4E{+}7$	1.769
44.2	0.0016	0.40935	0.000905	$2.5E{+}7$	1.769
44.3	0.00159	0.40935	0.000901	$2.5E{+}7$	1.769
44.4	0.00159	0.40935	0.000897	$2.5E{+}7$	1.769

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
44.5	0.00158	0.40934	0.000893	2.6E+7	1.769
44.6	0.00157	0.40934	0.000889	2.6E+7	1.769
44.7	0.00157	0.40933	0.000885	2.6E+7	1.769
44.8	0.00156	0.40933	0.000881	2.7E+7	1.769
44.9	0.00155	0.40932	0.000877	2.7E+7	1.769
45	0.00154	0.40932	0.000873	2.8E+7	1.769
45.1	0.00154	0.40931	0.000869	2.8E+7	1.769
45.2	0.00153	0.40931	0.000866	2.8E+7	1.769
45.3	0.00152	0.4093	0.000862	2.9E+7	1.769
45.4	0.00152	0.4093	0.000858	2.9E+7	1.769
45.5	0.00151	0.40929	0.000854	3.0E+7	1.769
45.6	0.0015	0.40929	0.000851	3.0E+7	1.769
45.7	0.0015	0.40929	0.000847	3.1E+7	1.769
45.8	0.00149	0.40928	0.000843	3.1E+7	1.769
45.9	0.00148	0.40928	0.000839	3.2E+7	1.769
46	0.00148	0.40927	0.000836	3.2E+7	1.769
46.1	0.00147	0.40927	0.000832	3.2E+7	1.769
46.2	0.00147	0.40926	0.000829	3.3E+7	1.769
46.3	0.00146	0.40926	0.000825	3.3E+7	1.769
46.4	0.00145	0.40926	0.000821	3.4E+7	1.769
46.5	0.00145	0.40925	0.000818	3.4E+7	1.769
46.6	0.00144	0.40925	0.000814	3.5E+7	1.769
46.7	0.00143	0.40924	0.000811	3.5E+7	1.769
46.8	0.00143	0.40924	0.000807	3.6E+7	1.769
46.9	0.00142	0.40924	0.000804	3.6E+7	1.769
47	0.00142	0.40923	0.000801	3.7E+7	1.769
47.1	0.00141	0.40923	0.000797	3.7E+7	1.769
47.2	0.0014	0.40922	0.000794	3.8E+7	1.769
47.3	0.0014	0.40922	0.000791	3.9E+7	1.769
47.4	0.00139	0.40922	0.000787	3.9E+7	1.769
47.5	0.00139	0.40921	0.000784	4.0E+7	1.769
47.6	0.00138	0.40921	0.000781	4.0E+7	1.769
47.7	0.00137	0.4092	0.000777	4.1E+7	1.769

Table 6.2: Rayleigh Flow Table for k=1.3 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
47.8	0.00137	0.4092	0.000774	4.1E+7	1.769
47.9	0.00136	0.4092	0.000771	4.2E+7	1.769
48	0.00136	0.40919	0.000768	4.2E+7	1.769
48.1	0.00135	0.40919	0.000764	4.3E+7	1.769
48.2	0.00135	0.40918	0.000761	4.4E+7	1.769
48.3	0.00134	0.40918	0.000758	4.4E+7	1.769
48.4	0.00134	0.40918	0.000755	4.5E+7	1.769
48.5	0.00133	0.40917	0.000752	4.5E+7	1.769
48.6	0.00132	0.40917	0.000749	4.6E+7	1.769
48.7	0.00132	0.40917	0.000746	4.7E+7	1.769
48.8	0.00131	0.40916	0.000743	4.7E+7	1.769
48.9	0.00131	0.40916	0.00074	4.8E+7	1.769
49	0.0013	0.40916	0.000737	4.9E+7	1.769
49.1	0.0013	0.40915	0.000734	4.9E+7	1.769
49.2	0.00129	0.40915	0.000731	5.0E+7	1.769
49.3	0.00129	0.40914	0.000728	5.1E+7	1.769
49.4	0.00128	0.40914	0.000725	5.1E+7	1.769
49.5	0.00128	0.40914	0.000722	5.2E+7	1.769
49.6	0.00127	0.40913	0.000719	5.3E+7	1.769
49.7	0.00127	0.40913	0.000716	5.4E+7	1.769
49.8	0.00126	0.40913	0.000713	5.4E+7	1.769
49.9	0.00126	0.40912	0.00071	5.5E+7	1.769
50.	0.00125	0.40912	0.000707	5.6E+7	1.769

6.3 Rayleigh Flow Table for k=1.4

Table 6.3: Rayleigh Flow Table for k=1.4

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
0.01	0.000576	0.00048	2.4	1.268	0.00024
0.02	0.0023	0.00192	2.399	1.268	0.000959
0.03	0.00517	0.00431	2.397	1.267	0.00216

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{{T_0}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho^*}{\rho}$
0.04	0.00917	0.00765	2.395	1.266	0.00383
0.05	0.0143	0.011922	2.392	1.266	0.00598
0.06	0.020529	0.017119	2.388	1.265	0.0086
0.07	0.027841	0.023223	2.384	1.264	0.01168
0.08	0.036212	0.030215	2.379	1.262	0.015224
0.09	0.045616	0.038075	2.373	1.261	0.019222
0.1	0.05602	0.046777	2.367	1.259	0.023669
0.11	0.067393	0.056297	2.36	1.257	0.028556
0.12	0.079698	0.066606	2.353	1.255	0.033877
0.13	0.092896	0.077675	2.345	1.253	0.039623
0.14	0.10695	0.089471	2.336	1.251	0.045784
0.15	0.12181	0.10196	2.327	1.249	0.052351
0.16	0.13743	0.11511	2.317	1.246	0.059314
0.17	0.15377	0.12888	2.307	1.243	0.066663
0.18	0.17078	0.14324	2.296	1.241	0.074386
0.19	0.18841	0.15814	2.285	1.238	0.082472
0.2	0.20661	0.17355	2.273	1.235	0.090909
0.21	0.22533	0.18943	2.26	1.231	0.099685
0.22	0.24452	0.20574	2.248	1.228	0.10879
0.23	0.26413	0.22244	2.235	1.225	0.11821
0.24	0.28411	0.23948	2.221	1.221	0.12792
0.25	0.3044	0.25684	2.207	1.218	0.13793
0.26	0.32496	0.27446	2.193	1.214	0.14821
0.27	0.34573	0.29231	2.178	1.21	0.15876
0.28	0.36667	0.31035	2.163	1.206	0.16955
0.29	0.38774	0.32855	2.147	1.203	0.18058
0.3	0.40887	0.34686	2.131	1.199	0.19183
0.31	0.43004	0.36525	2.115	1.195	0.20329
0.32	0.45119	0.38369	2.099	1.19	0.21495
0.33	0.47228	0.40214	2.083	1.186	0.22678
0.34	0.49327	0.42056	2.066	1.182	0.23879
0.35	0.51413	0.43894	2.049	1.178	0.25096
0.36	0.53482	0.45723	2.031	1.174	0.26327

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T^*}}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P^*}}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
0.37	0.55529	0.47541	2.014	1.169	0.27572
0.38	0.57553	0.49346	1.996	1.165	0.28828
0.39	0.59549	0.51134	1.979	1.161	0.30095
0.4	0.61515	0.52903	1.961	1.157	0.31373
0.41	0.63448	0.54651	1.943	1.152	0.32658
0.42	0.65346	0.56376	1.925	1.148	0.33951
0.43	0.67205	0.58076	1.906	1.144	0.35251
0.44	0.69025	0.59748	1.888	1.139	0.36556
0.45	0.70804	0.61393	1.87	1.135	0.37865
0.46	0.72538	0.63007	1.852	1.131	0.39178
0.47	0.74228	0.64589	1.833	1.127	0.40493
0.48	0.75871	0.66139	1.815	1.122	0.4181
0.49	0.77466	0.67655	1.796	1.118	0.43127
0.5	0.79012	0.69136	1.778	1.114	0.44444
0.51	0.80509	0.70581	1.759	1.11	0.45761
0.52	0.81955	0.7199	1.741	1.106	0.47075
0.53	0.83351	0.73361	1.723	1.102	0.48387
0.54	0.84695	0.74695	1.704	1.098	0.49696
0.55	0.85987	0.75991	1.686	1.094	0.51001
0.56	0.87227	0.77249	1.668	1.09	0.52302
0.57	0.88416	0.78468	1.65	1.086	0.53597
0.58	0.89552	0.79648	1.632	1.083	0.54887
0.59	0.90637	0.80789	1.614	1.079	0.5617
0.6	0.9167	0.81892	1.596	1.075	0.57447
0.61	0.92653	0.82957	1.578	1.072	0.58716
0.62	0.93584	0.83983	1.56	1.068	0.59978
0.63	0.94466	0.8497	1.543	1.065	0.61232
0.64	0.95298	0.8592	1.525	1.061	0.62477
0.65	0.96081	0.86833	1.508	1.058	0.63713
0.66	0.96816	0.87708	1.491	1.055	0.64941
0.67	0.97503	0.88547	1.474	1.052	0.66158
0.68	0.98144	0.8935	1.457	1.049	0.67366
0.69	0.98739	0.90118	1.44	1.046	0.68564

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{{T_0}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho^*}{\rho}$
0.7	0.9929	0.9085	1.423	1.043	0.69751
0.71	0.99796	0.91548	1.407	1.04	0.70928
0.72	1.003	0.92212	1.391	1.038	0.72093
0.73	1.007	0.92843	1.375	1.035	0.73248
0.74	1.011	0.93442	1.359	1.033	0.74392
0.75	1.014	0.94009	1.343	1.03	0.75524
0.76	1.017	0.94546	1.327	1.028	0.76645
0.77	1.02	0.95052	1.311	1.026	0.77755
0.78	1.022	0.95528	1.296	1.023	0.78853
0.79	1.024	0.95975	1.281	1.021	0.79939
0.8	1.025	0.96395	1.266	1.019	0.81013
0.81	1.027	0.96787	1.251	1.017	0.82075
0.81391	1.027	0.96933	1.245	1.017	0.82487
0.81781	1.027	0.97075	1.239	1.016	0.82896
0.82172	1.028	0.97213	1.234	1.015	0.83304
0.82562	1.028	0.97347	1.228	1.015	0.83711
0.82953	1.028	0.97477	1.222	1.014	0.84115
0.83344	1.028	0.97603	1.217	1.013	0.84518
0.83734	1.028	0.97725	1.211	1.013	0.84918
0.84125	1.029	0.97844	1.206	1.012	0.85317
0.84515	1.029	0.97959	1.2	1.012	0.85714
0.91	1.023	0.99366	1.111	1.004	0.92039
0.92	1.021	0.99506	1.098	1.003	0.9297
0.93	1.019	0.99627	1.086	1.002	0.93889
0.94	1.017	0.99729	1.073	1.002	0.94797
0.95	1.015	0.99814	1.06	1.001	0.95693
0.96	1.012	0.99883	1.048	1.001	0.96577
0.97	1.009	0.99935	1.036	1	0.9745
0.98	1.006	0.99971	1.024	1	0.98311
0.99	1.003	0.99993	1.012	1	0.99161
1	1	1	1	1	1
1.01	0.99659	0.99993	0.98841	1	1.008
1.02	0.99304	0.99973	0.97698	1	1.016

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
1.03	0.98936	0.9994	0.96569	1	1.025
1.04	0.98554	0.99895	0.95456	1.001	1.032
1.05	0.98161	0.99838	0.94358	1.001	1.04
1.06	0.97755	0.99769	0.93275	1.002	1.048
1.07	0.97339	0.9969	0.92206	1.002	1.056
1.08	0.96913	0.99601	0.91152	1.003	1.063
1.09	0.96477	0.99501	0.90112	1.004	1.071
1.1	0.96031	0.99392	0.89087	1.005	1.078
1.11	0.95577	0.99275	0.88075	1.006	1.085
1.12	0.95115	0.99148	0.87078	1.007	1.092
1.13	0.94645	0.99013	0.86094	1.008	1.099
1.14	0.94169	0.98871	0.85123	1.01	1.106
1.15	0.93685	0.98721	0.84166	1.011	1.113
1.16	0.93196	0.98564	0.83222	1.012	1.12
1.17	0.92701	0.984	0.82292	1.014	1.126
1.18	0.922	0.9823	0.81374	1.016	1.133
1.19	0.91695	0.98054	0.80468	1.018	1.14
1.2	0.91185	0.97872	0.79576	1.019	1.146
1.01	0.99659	0.99993	0.98841	1	1.008
1.02	0.99304	0.99973	0.97698	1	1.016
1.03	0.98936	0.9994	0.96569	1	1.025
1.04	0.98554	0.99895	0.95456	1.001	1.032
1.05	0.98161	0.99838	0.94358	1.001	1.04
1.06	0.97755	0.99769	0.93275	1.002	1.048
1.07	0.97339	0.9969	0.92206	1.002	1.056
1.08	0.96913	0.99601	0.91152	1.003	1.063
1.09	0.96477	0.99501	0.90112	1.004	1.071
1.1	0.96031	0.99392	0.89087	1.005	1.078
1.11	0.95577	0.99275	0.88075	1.006	1.085
1.12	0.95115	0.99148	0.87078	1.007	1.092
1.13	0.94645	0.99013	0.86094	1.008	1.099
1.14	0.94169	0.98871	0.85123	1.01	1.106
1.15	0.93685	0.98721	0.84166	1.011	1.113

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
1.16	0.93196	0.98564	0.83222	1.012	1.12
1.17	0.92701	0.984	0.82292	1.014	1.126
1.18	0.922	0.9823	0.81374	1.016	1.133
1.19	0.91695	0.98054	0.80468	1.018	1.14
1.2	0.91185	0.97872	0.79576	1.019	1.146
1.21	0.90671	0.97684	0.78695	1.021	1.152
1.22	0.90153	0.97492	0.77827	1.023	1.158
1.23	0.89632	0.97294	0.76971	1.026	1.164
1.24	0.89108	0.97092	0.76127	1.028	1.171
1.25	0.88581	0.96886	0.75294	1.03	1.176
1.26	0.88052	0.96675	0.74473	1.033	1.182
1.27	0.87521	0.96461	0.73663	1.035	1.188
1.28	0.86988	0.96243	0.72865	1.038	1.194
1.29	0.86453	0.96022	0.72078	1.041	1.199
1.3	0.85917	0.95798	0.71301	1.044	1.205
1.31	0.8538	0.95571	0.70536	1.047	1.21
1.32	0.84843	0.95341	0.6978	1.05	1.216
1.33	0.84305	0.95108	0.69036	1.053	1.221
1.34	0.83766	0.94873	0.68301	1.056	1.226
1.35	0.83227	0.94637	0.67577	1.059	1.232
1.36	0.82689	0.94398	0.66863	1.063	1.237
1.37	0.82151	0.94157	0.66158	1.066	1.242
1.38	0.81613	0.93914	0.65464	1.07	1.247
1.39	0.81076	0.93671	0.64778	1.074	1.252
1.4	0.80539	0.93425	0.64103	1.078	1.256
1.41	0.80004	0.93179	0.63436	1.082	1.261
1.42	0.79469	0.92931	0.62779	1.086	1.266
1.43	0.78936	0.92683	0.6213	1.09	1.27
1.44	0.78405	0.92434	0.61491	1.094	1.275
1.45	0.77874	0.92184	0.6086	1.098	1.28
1.46	0.77346	0.91933	0.60237	1.103	1.284
1.47	0.76819	0.91682	0.59623	1.107	1.288
1.48	0.76294	0.91431	0.59018	1.112	1.293

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
1.49	0.75771	0.91179	0.58421	1.117	1.297
1.5	0.7525	0.90928	0.57831	1.122	1.301
1.51	0.74732	0.90676	0.5725	1.126	1.305
1.52	0.74215	0.90424	0.56676	1.132	1.309
1.53	0.73701	0.90172	0.56111	1.137	1.313
1.54	0.73189	0.8992	0.55552	1.142	1.317
1.55	0.7268	0.89669	0.55002	1.147	1.321
1.56	0.72173	0.89418	0.54458	1.153	1.325
1.57	0.71669	0.89168	0.53922	1.158	1.329
1.58	0.71168	0.88917	0.53393	1.164	1.333
1.59	0.70669	0.88668	0.52871	1.17	1.337
1.6	0.70174	0.88419	0.52356	1.176	1.34
1.61	0.6968	0.8817	0.51848	1.182	1.344
1.62	0.6919	0.87922	0.51346	1.188	1.348
1.63	0.68703	0.87675	0.50851	1.194	1.351
1.64	0.68219	0.87429	0.50363	1.2	1.355
1.65	0.67738	0.87184	0.4988	1.207	1.358
1.66	0.67259	0.86939	0.49405	1.213	1.361
1.67	0.66784	0.86696	0.48935	1.22	1.365
1.68	0.66312	0.86453	0.48472	1.226	1.368
1.69	0.65843	0.86212	0.48014	1.233	1.371
1.7	0.65377	0.85971	0.47562	1.24	1.375
1.71	0.64914	0.85731	0.47117	1.247	1.378
1.72	0.64455	0.85493	0.46677	1.254	1.381
1.73	0.63999	0.85256	0.46242	1.262	1.384
1.74	0.63545	0.85019	0.45813	1.269	1.387
1.75	0.63095	0.84784	0.4539	1.277	1.39
1.76	0.62649	0.84551	0.44972	1.284	1.393
1.77	0.62205	0.84318	0.44559	1.292	1.396
1.78	0.61765	0.84087	0.44152	1.3	1.399
1.79	0.61328	0.83857	0.4375	1.308	1.402
1.8	0.60894	0.83628	0.43353	1.316	1.405
1.81	0.60464	0.834	0.4296	1.324	1.407

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
1.82	0.60036	0.83174	0.42573	1.332	1.41
1.83	0.59612	0.82949	0.42191	1.341	1.413
1.84	0.59191	0.82726	0.41813	1.349	1.416
1.85	0.58774	0.82504	0.4144	1.358	1.418
1.86	0.58359	0.82283	0.41072	1.367	1.421
1.87	0.57948	0.82064	0.40708	1.376	1.424
1.88	0.5754	0.81845	0.40349	1.385	1.426
1.89	0.57136	0.81629	0.39994	1.394	1.429
1.9	0.56734	0.81414	0.39643	1.403	1.431
1.91	0.56336	0.812	0.39297	1.413	1.434
1.92	0.55941	0.80987	0.38955	1.422	1.436
1.93	0.55549	0.80776	0.38617	1.432	1.438
1.94	0.5516	0.80567	0.38283	1.442	1.441
1.95	0.54774	0.80358	0.37954	1.452	1.443
1.96	0.54392	0.80152	0.37628	1.462	1.446
1.97	0.54012	0.79946	0.37306	1.472	1.448
1.98	0.53636	0.79742	0.36988	1.482	1.45
1.99	0.53263	0.7954	0.36674	1.493	1.452
2	0.52893	0.79339	0.36364	1.503	1.455
2.01	0.52525	0.79139	0.36057	1.514	1.457
2.02	0.52161	0.78941	0.35754	1.525	1.459
2.03	0.518	0.78744	0.35454	1.536	1.461
2.04	0.51442	0.78549	0.35158	1.547	1.463
2.05	0.51087	0.78355	0.34866	1.558	1.465
2.06	0.50735	0.78162	0.34577	1.569	1.467
2.07	0.50386	0.77971	0.34291	1.581	1.469
2.08	0.5004	0.77782	0.34009	1.592	1.471
2.09	0.49696	0.77593	0.3373	1.604	1.473
2.1	0.49356	0.77406	0.33454	1.616	1.475
2.11	0.49018	0.77221	0.33182	1.628	1.477
2.12	0.48684	0.77037	0.32912	1.64	1.479
2.13	0.48352	0.76854	0.32646	1.653	1.481
2.14	0.48023	0.76673	0.32382	1.665	1.483

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
2.15	0.47696	0.76493	0.32122	1.678	1.485
2.16	0.47373	0.76314	0.31865	1.691	1.487
2.17	0.47052	0.76137	0.3161	1.704	1.488
2.18	0.46734	0.75961	0.31359	1.717	1.49
2.19	0.46418	0.75787	0.3111	1.73	1.492
2.2	0.46106	0.75613	0.30864	1.743	1.494
2.21	0.45796	0.75442	0.30621	1.757	1.496
2.22	0.45488	0.75271	0.30381	1.771	1.497
2.23	0.45184	0.75102	0.30143	1.785	1.499
2.24	0.44882	0.74934	0.29908	1.799	1.501
2.25	0.44582	0.74768	0.29675	1.813	1.502
2.26	0.44285	0.74602	0.29446	1.827	1.504
2.27	0.4399	0.74438	0.29218	1.842	1.506
2.28	0.43698	0.74276	0.28993	1.856	1.507
2.29	0.43409	0.74114	0.28771	1.871	1.509
2.3	0.43122	0.73954	0.28551	1.886	1.51
2.31	0.42838	0.73795	0.28333	1.901	1.512
2.32	0.42555	0.73638	0.28118	1.916	1.513
2.33	0.42276	0.73482	0.27905	1.932	1.515
2.34	0.41998	0.73326	0.27695	1.948	1.516
2.35	0.41723	0.73173	0.27487	1.963	1.518
2.36	0.41451	0.7302	0.27281	1.979	1.519
2.37	0.41181	0.72868	0.27077	1.996	1.521
2.38	0.40913	0.72718	0.26875	2.012	1.522
2.39	0.40647	0.72569	0.26676	2.028	1.524
2.4	0.40384	0.72421	0.26478	2.045	1.525
2.41	0.40122	0.72275	0.26283	2.062	1.527
2.42	0.39864	0.72129	0.2609	2.079	1.528
2.43	0.39607	0.71985	0.25899	2.096	1.529
2.44	0.39352	0.71842	0.2571	2.114	1.531
2.45	0.391	0.71699	0.25522	2.131	1.532
2.46	0.3885	0.71558	0.25337	2.149	1.533
2.47	0.38602	0.71419	0.25154	2.167	1.535

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
2.48	0.38356	0.7128	0.24973	2.185	1.536
2.49	0.38112	0.71142	0.24793	2.203	1.537
2.5	0.3787	0.71006	0.24615	2.222	1.538
2.51	0.3763	0.70871	0.2444	2.241	1.54
2.52	0.37392	0.70736	0.24266	2.259	1.541
2.53	0.37157	0.70603	0.24093	2.279	1.542
2.54	0.36923	0.70471	0.23923	2.298	1.543
2.55	0.36691	0.7034	0.23754	2.317	1.545
2.56	0.36461	0.7021	0.23587	2.337	1.546
2.57	0.36233	0.70081	0.23422	2.357	1.547
2.58	0.36007	0.69952	0.23258	2.377	1.548
2.59	0.35783	0.69826	0.23096	2.397	1.549
2.6	0.35561	0.697	0.22936	2.418	1.55
2.61	0.35341	0.69575	0.22777	2.438	1.552
2.62	0.35122	0.69451	0.2262	2.459	1.553
2.63	0.34906	0.69328	0.22464	2.48	1.554
2.64	0.34691	0.69206	0.2231	2.502	1.555
2.65	0.34478	0.69084	0.22158	2.523	1.556
2.66	0.34266	0.68964	0.22007	2.545	1.557
2.67	0.34057	0.68845	0.21857	2.567	1.558
2.68	0.33849	0.68727	0.21709	2.589	1.559
2.69	0.33643	0.6861	0.21562	2.612	1.56
2.7	0.33439	0.68494	0.21417	2.634	1.561
2.71	0.33236	0.68378	0.21273	2.657	1.562
2.72	0.33035	0.68264	0.21131	2.68	1.563
2.73	0.32836	0.6815	0.2099	2.704	1.564
2.74	0.32638	0.68037	0.2085	2.727	1.565
2.75	0.32442	0.67926	0.20712	2.751	1.566
2.76	0.32248	0.67815	0.20575	2.775	1.567
2.77	0.32055	0.67705	0.20439	2.799	1.568
2.78	0.31864	0.67595	0.20305	2.823	1.569
2.79	0.31674	0.67487	0.20172	2.848	1.57
2.8	0.31486	0.6738	0.2004	2.873	1.571

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
2.81	0.31299	0.67273	0.1991	2.898	1.572
2.82	0.31114	0.67167	0.1978	2.924	1.573
2.83	0.30931	0.67062	0.19652	2.949	1.574
2.84	0.30749	0.66958	0.19525	2.975	1.575
2.85	0.30568	0.66855	0.19399	3.001	1.576
2.86	0.30389	0.66752	0.19275	3.028	1.577
2.87	0.30211	0.66651	0.19151	3.054	1.577
2.88	0.30035	0.6655	0.19029	3.081	1.578
2.89	0.2986	0.6645	0.18908	3.108	1.579
2.9	0.29687	0.6635	0.18788	3.136	1.58
2.91	0.29515	0.66252	0.18669	3.164	1.581
2.92	0.29344	0.66154	0.18551	3.191	1.582
2.93	0.29175	0.66057	0.18435	3.22	1.583
2.94	0.29007	0.6596	0.18319	3.248	1.583
2.95	0.28841	0.65865	0.18205	3.277	1.584
2.96	0.28675	0.6577	0.18091	3.306	1.585
2.97	0.28512	0.65676	0.17979	3.335	1.586
2.98	0.28349	0.65583	0.17867	3.365	1.587
2.99	0.28188	0.6549	0.17757	3.394	1.587
3	0.28028	0.65398	0.17647	3.424	1.588
3.01	0.27869	0.65307	0.17539	3.455	1.589
3.02	0.27711	0.65216	0.17431	3.485	1.59
3.03	0.27555	0.65126	0.17324	3.516	1.591
3.04	0.274	0.65037	0.17219	3.548	1.591
3.05	0.27246	0.64949	0.17114	3.579	1.592
3.06	0.27094	0.64861	0.1701	3.611	1.593
3.07	0.26942	0.64774	0.16908	3.643	1.594
3.08	0.26792	0.64687	0.16806	3.675	1.594
3.09	0.26643	0.64601	0.16705	3.708	1.595
3.1	0.26495	0.64516	0.16604	3.741	1.596
3.11	0.26349	0.64432	0.16505	3.774	1.596
3.12	0.26203	0.64348	0.16407	3.808	1.597
3.13	0.26059	0.64265	0.16309	3.841	1.598

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{{T_0}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho^*}{\rho}$
3.14	0.25915	0.64182	0.16212	3.876	1.598
3.15	0.25773	0.641	0.16117	3.91	1.599
3.16	0.25632	0.64018	0.16022	3.945	1.6
3.17	0.25492	0.63938	0.15927	3.98	1.601
3.18	0.25353	0.63857	0.15834	4.015	1.601
3.19	0.25215	0.63778	0.15741	4.051	1.602
3.2	0.25078	0.63699	0.15649	4.087	1.603
3.21	0.24943	0.63621	0.15558	4.123	1.603
3.22	0.24808	0.63543	0.15468	4.16	1.604
3.23	0.24674	0.63465	0.15379	4.197	1.604
3.24	0.24541	0.63389	0.1529	4.234	1.605
3.25	0.2441	0.63313	0.15202	4.272	1.606
3.26	0.24279	0.63237	0.15115	4.31	1.606
3.27	0.24149	0.63162	0.15028	4.348	1.607
3.28	0.24021	0.63088	0.14942	4.387	1.608
3.29	0.23893	0.63014	0.14857	4.426	1.608
3.3	0.23766	0.6294	0.14773	4.465	1.609
3.31	0.2364	0.62868	0.14689	4.505	1.609
3.32	0.23515	0.62795	0.14606	4.545	1.61
3.33	0.23391	0.62724	0.14524	4.586	1.611
3.34	0.23268	0.62652	0.14442	4.626	1.611
3.35	0.23146	0.62582	0.14361	4.667	1.612
3.36	0.23025	0.62512	0.14281	4.709	1.612
3.37	0.22905	0.62442	0.14201	4.751	1.613
3.38	0.22785	0.62373	0.14122	4.793	1.613
3.39	0.22667	0.62304	0.14044	4.835	1.614
3.4	0.22549	0.62236	0.13966	4.878	1.615
3.41	0.22432	0.62168	0.13889	4.922	1.615
3.42	0.22317	0.62101	0.13813	4.965	1.616
3.43	0.22201	0.62034	0.13737	5.009	1.616
3.44	0.22087	0.61968	0.13662	5.054	1.617
3.45	0.21974	0.61902	0.13587	5.098	1.617
3.46	0.21861	0.61837	0.13513	5.144	1.618

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
3.47	0.2175	0.61772	0.1344	5.189	1.618
3.48	0.21639	0.61708	0.13367	5.235	1.619
3.49	0.21529	0.61644	0.13295	5.281	1.619
3.5	0.21419	0.6158	0.13223	5.328	1.62
3.51	0.21311	0.61517	0.13152	5.375	1.62
3.52	0.21203	0.61455	0.13081	5.423	1.621
3.53	0.21096	0.61393	0.13011	5.471	1.621
3.54	0.2099	0.61331	0.12942	5.519	1.622
3.55	0.20885	0.6127	0.12873	5.568	1.622
3.56	0.2078	0.61209	0.12805	5.617	1.623
3.57	0.20676	0.61149	0.12737	5.666	1.623
3.58	0.20573	0.61089	0.1267	5.716	1.624
3.59	0.2047	0.61029	0.12603	5.767	1.624
3.6	0.20369	0.6097	0.12537	5.817	1.625
3.61	0.20268	0.60911	0.12471	5.869	1.625
3.62	0.20167	0.60853	0.12406	5.92	1.626
3.63	0.20068	0.60795	0.12341	5.972	1.626
3.64	0.19969	0.60738	0.12277	6.025	1.627
3.65	0.19871	0.60681	0.12213	6.078	1.627
3.66	0.19773	0.60624	0.1215	6.131	1.628
3.67	0.19677	0.60568	0.12087	6.185	1.628
3.68	0.19581	0.60512	0.12024	6.239	1.628
3.69	0.19485	0.60456	0.11963	6.294	1.629
3.7	0.1939	0.60401	0.11901	6.349	1.629
3.71	0.19296	0.60346	0.1184	6.404	1.63
3.72	0.19203	0.60292	0.1178	6.46	1.63
3.73	0.1911	0.60238	0.1172	6.517	1.631
3.74	0.19018	0.60184	0.1166	6.574	1.631
3.75	0.18926	0.60131	0.11601	6.631	1.631
3.76	0.18836	0.60078	0.11543	6.689	1.632
3.77	0.18745	0.60025	0.11484	6.748	1.632
3.78	0.18656	0.59973	0.11427	6.806	1.633
3.79	0.18567	0.59921	0.11369	6.866	1.633

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
3.8	0.18478	0.5987	0.11312	6.926	1.633
3.81	0.18391	0.59819	0.11256	6.986	1.634
3.82	0.18303	0.59768	0.112	7.047	1.634
3.83	0.18217	0.59717	0.11144	7.108	1.635
3.84	0.18131	0.59667	0.11089	7.17	1.635
3.85	0.18045	0.59617	0.11034	7.232	1.635
3.86	0.17961	0.59568	0.10979	7.295	1.636
3.87	0.17876	0.59519	0.10925	7.358	1.636
3.88	0.17793	0.5947	0.10871	7.422	1.637
3.89	0.17709	0.59421	0.10818	7.486	1.637
3.9	0.17627	0.59373	0.10765	7.551	1.637
3.91	0.17545	0.59325	0.10713	7.616	1.638
3.92	0.17463	0.59278	0.10661	7.682	1.638
3.93	0.17383	0.59231	0.10609	7.748	1.639
3.94	0.17302	0.59184	0.10557	7.815	1.639
3.95	0.17222	0.59137	0.10506	7.882	1.639
3.96	0.17143	0.59091	0.10456	7.95	1.64
3.97	0.17064	0.59045	0.10405	8.018	1.64
3.98	0.16986	0.58999	0.10355	8.087	1.64
3.99	0.16908	0.58954	0.10306	8.157	1.641
4	0.16831	0.58909	0.10256	8.227	1.641
4.01	0.16754	0.58864	0.10207	8.297	1.641
4.02	0.16678	0.58819	0.10159	8.369	1.642
4.03	0.16602	0.58775	0.10111	8.44	1.642
4.04	0.16527	0.58731	0.10063	8.513	1.642
4.05	0.16453	0.58687	0.10015	8.585	1.643
4.06	0.16378	0.58644	0.09968	8.659	1.643
4.07	0.16305	0.58601	0.099211	8.733	1.643
4.08	0.16231	0.58558	0.098745	8.807	1.644
4.09	0.16159	0.58516	0.098283	8.882	1.644
4.1	0.16086	0.58473	0.097823	8.958	1.644
4.11	0.16014	0.58431	0.097367	9.034	1.645
4.12	0.15943	0.5839	0.096914	9.111	1.645

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{{T_0}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho^*}{\rho}$
4.13	0.15872	0.58348	0.096464	9.188	1.645
4.14	0.15802	0.58307	0.096018	9.266	1.646
4.15	0.15732	0.58266	0.095574	9.345	1.646
4.16	0.15662	0.58225	0.095133	9.424	1.646
4.17	0.15593	0.58185	0.094695	9.504	1.647
4.18	0.15524	0.58145	0.09426	9.585	1.647
4.19	0.15456	0.58105	0.093829	9.666	1.647
4.2	0.15388	0.58065	0.0934	9.747	1.648
4.21	0.15321	0.58026	0.092974	9.83	1.648
4.22	0.15254	0.57987	0.092551	9.912	1.648
4.23	0.15187	0.57948	0.09213	9.996	1.648
4.24	0.15121	0.57909	0.091713	10.08	1.649
4.25	0.15056	0.5787	0.091298	10.16	1.649
4.26	0.1499	0.57832	0.090886	10.25	1.649
4.27	0.14926	0.57794	0.090477	10.34	1.65
4.28	0.14861	0.57757	0.090071	10.42	1.65
4.29	0.14797	0.57719	0.089667	10.51	1.65
4.3	0.14734	0.57682	0.089266	10.6	1.651
4.31	0.1467	0.57645	0.088867	10.69	1.651
4.32	0.14607	0.57608	0.088472	10.78	1.651
4.33	0.14545	0.57571	0.088078	10.87	1.651
4.34	0.14483	0.57535	0.087688	10.96	1.652
4.35	0.14421	0.57499	0.0873	11.05	1.652
4.36	0.1436	0.57463	0.086914	11.14	1.652
4.37	0.14299	0.57427	0.086531	11.23	1.652
4.38	0.14239	0.57392	0.086151	11.33	1.653
4.39	0.14178	0.57357	0.085773	11.42	1.653
4.4	0.14119	0.57322	0.085397	11.52	1.653
4.41	0.14059	0.57287	0.085024	11.61	1.654
4.42	0.14	0.57252	0.084653	11.71	1.654
4.43	0.13941	0.57218	0.084285	11.8	1.654
4.44	0.13883	0.57183	0.083919	11.9	1.654
4.45	0.13825	0.57149	0.083555	12	1.655

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
4.46	0.13767	0.57116	0.083194	12.1	1.655
4.47	0.1371	0.57082	0.082835	12.2	1.655
4.48	0.13653	0.57049	0.082478	12.3	1.655
4.49	0.13597	0.57015	0.082124	12.4	1.656
4.5	0.1354	0.56982	0.081772	12.5	1.656
4.51	0.13484	0.5695	0.081422	12.6	1.656
4.52	0.13429	0.56917	0.081074	12.71	1.656
4.53	0.13374	0.56885	0.080729	12.81	1.657
4.54	0.13319	0.56852	0.080385	12.92	1.657
4.55	0.13264	0.5682	0.080044	13.02	1.657
4.56	0.1321	0.56789	0.079705	13.13	1.657
4.57	0.13156	0.56757	0.079368	13.24	1.658
4.58	0.13102	0.56726	0.079033	13.34	1.658
4.59	0.13049	0.56694	0.078701	13.45	1.658
4.6	0.12996	0.56663	0.07837	13.56	1.658
4.61	0.12943	0.56632	0.078041	13.67	1.659
4.62	0.12891	0.56602	0.077715	13.78	1.659
4.63	0.12839	0.56571	0.07739	13.9	1.659
4.64	0.12787	0.56541	0.077068	14.01	1.659
4.65	0.12736	0.5651	0.076747	14.12	1.659
4.66	0.12685	0.5648	0.076429	14.24	1.66
4.67	0.12634	0.56451	0.076112	14.35	1.66
4.68	0.12583	0.56421	0.075797	14.47	1.66
4.69	0.12533	0.56391	0.075485	14.58	1.66
4.7	0.12483	0.56362	0.075174	14.7	1.661
4.71	0.12434	0.56333	0.074865	14.82	1.661
4.72	0.12384	0.56304	0.074558	14.94	1.661
4.73	0.12335	0.56275	0.074253	15.06	1.661
4.74	0.12286	0.56246	0.073949	15.18	1.661
4.75	0.12238	0.56218	0.073648	15.3	1.662
4.76	0.1219	0.5619	0.073348	15.42	1.662
4.77	0.12142	0.56161	0.07305	15.55	1.662
4.78	0.12094	0.56133	0.072754	15.67	1.662

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
4.79	0.12047	0.56106	0.07246	15.8	1.663
4.8	0.12	0.56078	0.072167	15.92	1.663
4.81	0.11953	0.5605	0.071877	16.05	1.663
4.82	0.11906	0.56023	0.071588	16.18	1.663
4.83	0.1186	0.55996	0.0713	16.31	1.663
4.84	0.11814	0.55969	0.071015	16.44	1.664
4.85	0.11768	0.55942	0.070731	16.57	1.664
4.86	0.11722	0.55915	0.070448	16.7	1.664
4.87	0.11677	0.55888	0.070168	16.83	1.664
4.88	0.11632	0.55862	0.069889	16.96	1.664
4.89	0.11587	0.55836	0.069612	17.1	1.665
4.9	0.11543	0.55809	0.069336	17.23	1.665
4.91	0.11499	0.55783	0.069062	17.37	1.665
4.92	0.11455	0.55758	0.06879	17.51	1.665
4.93	0.11411	0.55732	0.068519	17.64	1.665
4.94	0.11367	0.55706	0.06825	17.78	1.666
4.95	0.11324	0.55681	0.067982	17.92	1.666
4.96	0.11281	0.55655	0.067716	18.06	1.666
4.97	0.11238	0.5563	0.067451	18.2	1.666
4.98	0.11196	0.55605	0.067188	18.35	1.666
4.99	0.11153	0.5558	0.066927	18.49	1.666
5	0.11111	0.55556	0.066667	18.63	1.667
5.02	0.11028	0.55506	0.066151	18.93	1.667
5.04	0.10945	0.55458	0.065641	19.22	1.667
5.06	0.10863	0.5541	0.065138	19.52	1.668
5.08	0.10783	0.55362	0.06464	19.82	1.668
5.1	0.10703	0.55315	0.064147	20.13	1.668
5.12	0.10624	0.55269	0.06366	20.44	1.669
5.14	0.10546	0.55223	0.063179	20.76	1.669
5.16	0.10468	0.55177	0.062703	21.08	1.669
5.18	0.10392	0.55132	0.062232	21.41	1.67
5.2	0.10316	0.55088	0.061767	21.73	1.67
5.22	0.10241	0.55044	0.061306	22.07	1.67

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
5.24	0.10167	0.55	0.060851	22.41	1.671
5.26	0.10094	0.54957	0.060401	22.75	1.671
5.28	0.10021	0.54914	0.059955	23.09	1.671
5.3	0.099496	0.54872	0.059515	23.44	1.672
5.32	0.098786	0.5483	0.059079	23.8	1.672
5.34	0.098083	0.54789	0.058648	24.16	1.672
5.36	0.097388	0.54748	0.058222	24.52	1.673
5.38	0.0967	0.54707	0.0578	24.89	1.673
5.4	0.096019	0.54667	0.057383	25.27	1.673
5.42	0.095346	0.54627	0.056971	25.65	1.674
5.44	0.094679	0.54588	0.056562	26.03	1.674
5.46	0.094019	0.54549	0.056158	26.42	1.674
5.48	0.093366	0.54511	0.055759	26.81	1.674
5.5	0.092719	0.54473	0.055363	27.21	1.675
5.52	0.092079	0.54435	0.054972	27.61	1.675
5.54	0.091446	0.54397	0.054585	28.02	1.675
5.56	0.090819	0.5436	0.054202	28.44	1.676
5.58	0.090198	0.54324	0.053823	28.86	1.676
5.6	0.089584	0.54288	0.053447	29.28	1.676
5.62	0.088975	0.54252	0.053076	29.71	1.676
5.64	0.088373	0.54216	0.052709	30.14	1.677
5.66	0.087777	0.54181	0.052345	30.59	1.677
5.68	0.087186	0.54146	0.051985	31.03	1.677
5.7	0.086602	0.54112	0.051628	31.48	1.677
5.72	0.086023	0.54078	0.051276	31.94	1.678
5.74	0.08545	0.54044	0.050927	32.4	1.678
5.76	0.084883	0.5401	0.050581	32.87	1.678
5.78	0.084321	0.53977	0.050239	33.34	1.678
5.8	0.083765	0.53944	0.0499	33.82	1.679
5.82	0.083214	0.53912	0.049565	34.31	1.679
5.84	0.082668	0.5388	0.049233	34.8	1.679
5.86	0.082128	0.53848	0.048904	35.3	1.679
5.88	0.081592	0.53816	0.048579	35.8	1.68

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
5.9	0.081062	0.53785	0.048257	36.31	1.68
5.92	0.080538	0.53754	0.047938	36.82	1.68
5.94	0.080018	0.53723	0.047622	37.34	1.68
5.96	0.079503	0.53693	0.047309	37.87	1.68
5.98	0.078992	0.53663	0.046999	38.41	1.681
6	0.078487	0.53633	0.046693	38.95	1.681
6.02	0.077987	0.53603	0.046389	39.49	1.681
6.04	0.077491	0.53574	0.046088	40.05	1.681
6.06	0.077	0.53545	0.04579	40.6	1.682
6.08	0.076513	0.53516	0.045495	41.17	1.682
6.1	0.076031	0.53488	0.045203	41.74	1.682
6.12	0.075554	0.5346	0.044913	42.32	1.682
6.14	0.07508	0.53432	0.044627	42.91	1.682
6.16	0.074612	0.53404	0.044343	43.5	1.683
6.18	0.074147	0.53377	0.044061	44.1	1.683
6.2	0.073687	0.53349	0.043783	44.71	1.683
6.22	0.073231	0.53322	0.043507	45.32	1.683
6.24	0.072779	0.53296	0.043233	45.94	1.683
6.26	0.072332	0.53269	0.042963	46.57	1.684
6.28	0.071888	0.53243	0.042694	47.21	1.684
6.3	0.071448	0.53217	0.042428	47.85	1.684
6.32	0.071013	0.53191	0.042165	48.5	1.684
6.34	0.070581	0.53166	0.041904	49.15	1.684
6.36	0.070153	0.53141	0.041645	49.82	1.685
6.38	0.069729	0.53116	0.041389	50.49	1.685
6.4	0.069309	0.53091	0.041135	51.17	1.685
6.42	0.068893	0.53066	0.040884	51.86	1.685
6.44	0.06848	0.53042	0.040635	52.55	1.685
6.46	0.068071	0.53018	0.040388	53.25	1.685
6.48	0.067665	0.52994	0.040143	53.96	1.686
6.5	0.067263	0.5297	0.0399	54.68	1.686
6.52	0.066865	0.52946	0.03966	55.41	1.686
6.54	0.06647	0.52923	0.039422	56.14	1.686

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{{T_0}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho^*}{\rho}$
6.56	0.066078	0.529	0.039186	56.89	1.686
6.58	0.06569	0.52877	0.038952	57.64	1.686
6.6	0.065306	0.52854	0.03872	58.4	1.687
6.62	0.064924	0.52832	0.03849	59.16	1.687
6.64	0.064546	0.52809	0.038262	59.94	1.687
6.66	0.064171	0.52787	0.038036	60.72	1.687
6.68	0.0638	0.52765	0.037812	61.51	1.687
6.7	0.063431	0.52743	0.03759	62.32	1.687
6.72	0.063066	0.52722	0.037371	63.13	1.688
6.74	0.062704	0.527	0.037152	63.94	1.688
6.76	0.062345	0.52679	0.036936	64.77	1.688
6.78	0.061989	0.52658	0.036722	65.61	1.688
6.8	0.061636	0.52637	0.03651	66.45	1.688
6.82	0.061286	0.52616	0.036299	67.31	1.688
6.84	0.060939	0.52596	0.03609	68.17	1.689
6.86	0.060595	0.52575	0.035883	69.04	1.689
6.88	0.060253	0.52555	0.035678	69.92	1.689
6.9	0.059915	0.52535	0.035475	70.82	1.689
6.92	0.059579	0.52515	0.035273	71.72	1.689
6.94	0.059246	0.52496	0.035073	72.63	1.689
6.96	0.058916	0.52476	0.034874	73.55	1.689
6.98	0.058589	0.52457	0.034678	74.47	1.69
7	0.058264	0.52438	0.034483	75.41	1.69
7.02	0.057942	0.52419	0.034289	76.36	1.69
7.04	0.057623	0.524	0.034098	77.32	1.69
7.06	0.057306	0.52381	0.033907	78.29	1.69
7.08	0.056992	0.52362	0.033719	79.27	1.69
7.1	0.05668	0.52344	0.033532	80.26	1.69
7.12	0.056371	0.52326	0.033346	81.26	1.69
7.14	0.056064	0.52307	0.033162	82.27	1.691
7.16	0.05576	0.52289	0.03298	83.29	1.691
7.18	0.055458	0.52272	0.032799	84.32	1.691
7.2	0.055159	0.52254	0.032619	85.36	1.691

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^{*}}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^{*}}$	$\frac{\mathbf{P}}{\mathbf{P}^{*}}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^{*}}$	$\frac{\rho^{*}}{\rho}$
7.22	0.054862	0.52236	0.032441	86.41	1.691
7.24	0.054567	0.52219	0.032265	87.47	1.691
7.26	0.054275	0.52202	0.03209	88.54	1.691
7.28	0.053985	0.52184	0.031916	89.63	1.691
7.3	0.053698	0.52167	0.031744	90.72	1.692
7.32	0.053412	0.5215	0.031573	91.83	1.692
7.34	0.053129	0.52134	0.031403	92.94	1.692
7.36	0.052848	0.52117	0.031235	94.07	1.692
7.38	0.05257	0.52101	0.031068	95.21	1.692
7.4	0.052293	0.52084	0.030902	96.36	1.692
7.42	0.052019	0.52068	0.030738	97.52	1.692
7.44	0.051747	0.52052	0.030575	98.7	1.692
7.46	0.051477	0.52036	0.030414	99.88	1.693
7.48	0.051209	0.5202	0.030253	$1.0E{+}2$	1.693
7.5	0.050943	0.52004	0.030094	$1.0E{+}2$	1.693
7.52	0.050679	0.51989	0.029936	$1.0E{+}2$	1.693
7.54	0.050417	0.51973	0.02978	$1.0E{+}2$	1.693
7.56	0.050157	0.51958	0.029624	$1.1E{+}2$	1.693
7.58	0.0499	0.51942	0.02947	$1.1E{+}2$	1.693
7.6	0.049644	0.51927	0.029317	$1.1E{+}2$	1.693
7.62	0.04939	0.51912	0.029165	$1.1E{+}2$	1.693
7.64	0.049138	0.51897	0.029014	$1.1E{+}2$	1.694
7.66	0.048888	0.51882	0.028865	$1.1E{+}2$	1.694
7.68	0.048639	0.51868	0.028717	$1.1E{+}2$	1.694
7.7	0.048393	0.51853	0.028569	$1.2E{+}2$	1.694
7.72	0.048149	0.51839	0.028423	$1.2E{+}2$	1.694
7.74	0.047906	0.51824	0.028278	$1.2E{+}2$	1.694
7.76	0.047665	0.5181	0.028134	$1.2E{+}2$	1.694
7.78	0.047426	0.51796	0.027992	$1.2E{+}2$	1.694
7.8	0.047189	0.51782	0.02785	$1.2E{+}2$	1.694
7.82	0.046953	0.51768	0.027709	$1.2E{+}2$	1.694
7.84	0.04672	0.51754	0.02757	$1.2E{+}2$	1.695
7.86	0.046488	0.5174	0.027431	$1.3E{+}2$	1.695

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
7.88	0.046257	0.51727	0.027294	1.3E+2	1.695
7.9	0.046029	0.51713	0.027157	1.3E+2	1.695
7.92	0.045802	0.517	0.027022	1.3E+2	1.695
7.94	0.045576	0.51686	0.026887	1.3E+2	1.695
7.96	0.045353	0.51673	0.026754	1.3E+2	1.695
7.98	0.045131	0.5166	0.026622	1.4E+2	1.695
8	0.04491	0.51647	0.02649	1.4E+2	1.695
8.02	0.044692	0.51634	0.02636	1.4E+2	1.695
8.04	0.044474	0.51621	0.02623	1.4E+2	1.696
8.06	0.044259	0.51608	0.026101	1.4E+2	1.696
8.08	0.044045	0.51596	0.025974	1.4E+2	1.696
8.1	0.043832	0.51583	0.025847	1.4E+2	1.696
8.12	0.043621	0.5157	0.025721	1.5E+2	1.696
8.14	0.043411	0.51558	0.025596	1.5E+2	1.696
8.16	0.043203	0.51546	0.025472	1.5E+2	1.696
8.18	0.042997	0.51533	0.025349	1.5E+2	1.696
8.2	0.042792	0.51521	0.025227	1.5E+2	1.696
8.22	0.042588	0.51509	0.025106	1.5E+2	1.696
8.24	0.042386	0.51497	0.024985	1.6E+2	1.696
8.26	0.042185	0.51485	0.024866	1.6E+2	1.697
8.28	0.041986	0.51474	0.024747	1.6E+2	1.697
8.3	0.041788	0.51462	0.024629	1.6E+2	1.697
8.32	0.041591	0.5145	0.024512	1.6E+2	1.697
8.34	0.041396	0.51439	0.024396	1.6E+2	1.697
8.36	0.041202	0.51427	0.02428	1.7E+2	1.697
8.38	0.04101	0.51416	0.024166	1.7E+2	1.697
8.4	0.040819	0.51404	0.024052	1.7E+2	1.697
8.42	0.040629	0.51393	0.023939	1.7E+2	1.697
8.44	0.04044	0.51382	0.023827	1.7E+2	1.697
8.46	0.040253	0.51371	0.023715	1.8E+2	1.697
8.48	0.040067	0.5136	0.023605	1.8E+2	1.697
8.5	0.039883	0.51349	0.023495	1.8E+2	1.698
8.52	0.039699	0.51338	0.023386	1.8E+2	1.698

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
8.54	0.039517	0.51327	0.023277	1.8E+2	1.698
8.56	0.039336	0.51316	0.02317	1.9E+2	1.698
8.58	0.039157	0.51306	0.023063	1.9E+2	1.698
8.6	0.038978	0.51295	0.022957	1.9E+2	1.698
8.62	0.038801	0.51285	0.022851	1.9E+2	1.698
8.64	0.038625	0.51274	0.022747	1.9E+2	1.698
8.66	0.03845	0.51264	0.022643	2.0E+2	1.698
8.68	0.038276	0.51254	0.02254	2.0E+2	1.698
8.7	0.038104	0.51243	0.022437	2.0E+2	1.698
8.72	0.037933	0.51233	0.022335	2.0E+2	1.698
8.74	0.037762	0.51223	0.022234	2.0E+2	1.698
8.76	0.037593	0.51213	0.022134	2.1E+2	1.698
8.78	0.037425	0.51203	0.022034	2.1E+2	1.699
8.8	0.037259	0.51193	0.021935	2.1E+2	1.699
8.82	0.037093	0.51183	0.021836	2.1E+2	1.699
8.84	0.036928	0.51174	0.021738	2.2E+2	1.699
8.86	0.036765	0.51164	0.021641	2.2E+2	1.699
8.88	0.036602	0.51154	0.021545	2.2E+2	1.699
8.9	0.036441	0.51145	0.021449	2.2E+2	1.699
8.92	0.036281	0.51135	0.021354	2.2E+2	1.699
8.94	0.036121	0.51126	0.021259	2.3E+2	1.699
8.96	0.035963	0.51116	0.021165	2.3E+2	1.699
8.98	0.035806	0.51107	0.021072	2.3E+2	1.699
9	0.03565	0.51098	0.020979	2.3E+2	1.699
9.02	0.035494	0.51089	0.020887	2.4E+2	1.699
9.04	0.03534	0.5108	0.020795	2.4E+2	1.699
9.06	0.035187	0.5107	0.020704	2.4E+2	1.699
9.08	0.035035	0.51061	0.020614	2.4E+2	1.7
9.1	0.034884	0.51052	0.020524	2.5E+2	1.7
9.12	0.034734	0.51044	0.020435	2.5E+2	1.7
9.14	0.034584	0.51035	0.020347	2.5E+2	1.7
9.16	0.034436	0.51026	0.020259	2.5E+2	1.7
9.18	0.034289	0.51017	0.020171	2.6E+2	1.7

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
9.2	0.034142	0.51008	0.020084	2.6E+2	1.7
9.22	0.033997	0.51	0.019998	2.6E+2	1.7
9.24	0.033852	0.50991	0.019912	2.6E+2	1.7
9.26	0.033708	0.50983	0.019827	2.7E+2	1.7
9.28	0.033566	0.50974	0.019742	2.7E+2	1.7
9.3	0.033424	0.50966	0.019658	2.7E+2	1.7
9.32	0.033283	0.50957	0.019575	2.7E+2	1.7
9.34	0.033143	0.50949	0.019492	2.8E+2	1.7
9.36	0.033004	0.50941	0.019409	2.8E+2	1.7
9.38	0.032865	0.50933	0.019327	2.8E+2	1.7
9.4	0.032728	0.50925	0.019246	2.9E+2	1.701
9.42	0.032591	0.50916	0.019165	2.9E+2	1.701
9.44	0.032455	0.50908	0.019084	2.9E+2	1.701
9.46	0.032321	0.509	0.019004	2.9E+2	1.701
9.48	0.032186	0.50892	0.018925	3.0E+2	1.701
9.5	0.032053	0.50885	0.018846	3.0E+2	1.701
9.52	0.031921	0.50877	0.018767	3.0E+2	1.701
9.54	0.031789	0.50869	0.018689	3.1E+2	1.701
9.56	0.031658	0.50861	0.018612	3.1E+2	1.701
9.58	0.031528	0.50853	0.018535	3.1E+2	1.701
9.6	0.031399	0.50846	0.018458	3.2E+2	1.701
9.62	0.031271	0.50838	0.018382	3.2E+2	1.701
9.64	0.031143	0.5083	0.018306	3.2E+2	1.701
9.66	0.031016	0.50823	0.018231	3.2E+2	1.701
9.68	0.03089	0.50815	0.018157	3.3E+2	1.701
9.7	0.030765	0.50808	0.018082	3.3E+2	1.701
9.72	0.03064	0.50801	0.018009	3.3E+2	1.701
9.74	0.030516	0.50793	0.017935	3.4E+2	1.701
9.76	0.030393	0.50786	0.017862	3.4E+2	1.702
9.78	0.030271	0.50779	0.01779	3.4E+2	1.702
9.8	0.030149	0.50772	0.017718	3.5E+2	1.702
9.82	0.030028	0.50764	0.017646	3.5E+2	1.702
9.84	0.029908	0.50757	0.017575	3.5E+2	1.702

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^{*}}$	$\frac{T_0}{T_0{}^{*}}$	$\frac{P}{P^{*}}$	$\frac{P_0}{P_0{}^{*}}$	$\frac{\rho^{*}}{\rho}$
9.86	0.029789	0.5075	0.017505	$3.6E{+}2$	1.702
9.88	0.02967	0.50743	0.017434	$3.6E{+}2$	1.702
9.9	0.029552	0.50736	0.017364	$3.6E{+}2$	1.702
9.92	0.029435	0.50729	0.017295	$3.7E{+}2$	1.702
9.94	0.029318	0.50722	0.017226	$3.7E{+}2$	1.702
9.96	0.029202	0.50715	0.017157	$3.7E{+}2$	1.702
9.98	0.029087	0.50708	0.017089	$3.8E{+}2$	1.702
1	0.028972	0.50702	0.017021	$3.8E{+}2$	1.702
10.1	0.028409	0.50668	0.016688	$4.0E{+}2$	1.702
10.2	0.027863	0.50636	0.016365	$4.2E{+}2$	1.703
10.3	0.027332	0.50604	0.016051	$4.4E{+}2$	1.703
10.4	0.026815	0.50574	0.015746	$4.6E{+}2$	1.703
10.5	0.026313	0.50544	0.015449	$4.8E{+}2$	1.703
10.6	0.025826	0.50515	0.015161	$5.0E{+}2$	1.703
10.7	0.025351	0.50487	0.01488	$5.2E{+}2$	1.704
10.8	0.024889	0.50459	0.014608	$5.5E{+}2$	1.704
10.9	0.02444	0.50433	0.014343	$5.7E{+}2$	1.704
11	0.024003	0.50407	0.014085	$6.0E{+}2$	1.704
11.1	0.023578	0.50381	0.013833	$6.2E{+}2$	1.704
11.2	0.023163	0.50357	0.013589	$6.5E{+}2$	1.705
11.3	0.02276	0.50333	0.013351	$6.8E{+}2$	1.705
11.4	0.022366	0.50309	0.013119	$7.1E{+}2$	1.705
11.5	0.021983	0.50287	0.012893	$7.4E{+}2$	1.705
11.6	0.02161	0.50265	0.012673	$7.7E{+}2$	1.705
11.7	0.021246	0.50243	0.012458	$8.0E{+}2$	1.705
11.8	0.020891	0.50222	0.012249	$8.3E{+}2$	1.706
11.9	0.020545	0.50201	0.012045	$8.7E{+}2$	1.706
12	0.020207	0.50181	0.011846	$9.0E{+}2$	1.706
12.1	0.019878	0.50162	0.011652	$9.4E{+}2$	1.706
12.2	0.019556	0.50143	0.011463	$9.8E{+}2$	1.706
12.3	0.019243	0.50124	0.011278	$1.0E{+}3$	1.706
12.4	0.018936	0.50106	0.011098	$1.1E{+}3$	1.706
12.5	0.018637	0.50088	0.010922	$1.1E{+}3$	1.706

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
12.6	0.018345	0.50071	0.01075	$1.1E{+}3$	1.707
12.7	0.01806	0.50054	0.010582	$1.2E{+}3$	1.707
12.8	0.017781	0.50037	0.010418	$1.2E{+}3$	1.707
12.9	0.017509	0.50021	0.010258	$1.3E{+}3$	1.707
13	0.017243	0.50005	0.010101	$1.3E{+}3$	1.707
13.1	0.016983	0.4999	0.00995	$1.4E{+}3$	1.707
13.2	0.016729	0.49975	0.0098	$1.4E{+}3$	1.707
13.3	0.01648	0.4996	0.00965	$1.5E{+}3$	1.707
13.4	0.016237	0.49945	0.00951	$1.5E{+}3$	1.707
13.5	0.015999	0.49931	0.00937	$1.6E{+}3$	1.708
13.6	0.015767	0.49917	0.00923	$1.6E{+}3$	1.708
13.7	0.015539	0.49904	0.0091	$1.7E{+}3$	1.708
13.8	0.015316	0.49891	0.00897	$1.8E{+}3$	1.708
13.9	0.015098	0.49878	0.00884	$1.8E{+}3$	1.708
14	0.014885	0.49865	0.00871	$1.9E{+}3$	1.708
14.1	0.014676	0.49853	0.00859	$2.0E{+}3$	1.708
14.2	0.014472	0.4984	0.00847	$2.0E{+}3$	1.708
14.3	0.014271	0.49828	0.00835	$2.1E{+}3$	1.708
14.4	0.014075	0.49817	0.00824	$2.2E{+}3$	1.708
14.5	0.013883	0.49805	0.00813	$2.2E{+}3$	1.708
14.6	0.013695	0.49794	0.00802	$2.3E{+}3$	1.709
14.7	0.01351	0.49783	0.00791	$2.4E{+}3$	1.709
14.8	0.01333	0.49772	0.0078	$2.5E{+}3$	1.709
14.9	0.013152	0.49762	0.0077	$2.6E{+}3$	1.709
15	0.012979	0.49752	0.00759	$2.6E{+}3$	1.709
15.1	0.012808	0.49742	0.00749	$2.7E{+}3$	1.709
15.2	0.012641	0.49732	0.0074	$2.8E{+}3$	1.709
15.3	0.012478	0.49722	0.0073	$2.9E{+}3$	1.709
15.4	0.012317	0.49712	0.00721	$3.0E{+}3$	1.709
15.5	0.01216	0.49703	0.00711	$3.1E{+}3$	1.709
15.6	0.012005	0.49694	0.00702	$3.2E{+}3$	1.709
15.7	0.011854	0.49685	0.00693	$3.3E{+}3$	1.709
15.8	0.011705	0.49676	0.00685	$3.4E{+}3$	1.709

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
15.9	0.011559	0.49667	0.00676	3.5E+3	1.709
16	0.011416	0.49659	0.00668	3.6E+3	1.71
16.1	0.011275	0.4965	0.0066	3.7E+3	1.71
16.2	0.011137	0.49642	0.00651	3.9E+3	1.71
16.3	0.011002	0.49634	0.00643	4.0E+3	1.71
16.4	0.010869	0.49626	0.00636	4.1E+3	1.71
16.5	0.010738	0.49618	0.00628	4.2E+3	1.71
16.6	0.01061	0.49611	0.00621	4.3E+3	1.71
16.7	0.010484	0.49603	0.00613	4.5E+3	1.71
16.8	0.01036	0.49596	0.00606	4.6E+3	1.71
16.9	0.010238	0.49589	0.00599	4.7E+3	1.71
17	0.010119	0.49582	0.00592	4.9E+3	1.71
17.1	0.010001	0.49575	0.00585	5.0E+3	1.71
17.2	0.00989	0.49568	0.00578	5.2E+3	1.71
17.3	0.00977	0.49561	0.00571	5.3E+3	1.71
17.4	0.00966	0.49554	0.00565	5.5E+3	1.71
17.5	0.00955	0.49548	0.00558	5.6E+3	1.71
17.6	0.00944	0.49541	0.00552	5.8E+3	1.71
17.7	0.00934	0.49535	0.00546	5.9E+3	1.71
17.8	0.00923	0.49529	0.0054	6.1E+3	1.71
17.9	0.00913	0.49523	0.00534	6.3E+3	1.71
18	0.00903	0.49517	0.00528	6.4E+3	1.711
18.1	0.00893	0.49511	0.00522	6.6E+3	1.711
18.2	0.00883	0.49505	0.00516	6.8E+3	1.711
18.3	0.00874	0.49499	0.00511	7.0E+3	1.711
18.4	0.00864	0.49494	0.00505	7.2E+3	1.711
18.5	0.00855	0.49488	0.005	7.4E+3	1.711
18.6	0.00846	0.49483	0.00494	7.6E+3	1.711
18.7	0.00837	0.49478	0.00489	7.8E+3	1.711
18.8	0.00828	0.49472	0.00484	8.0E+3	1.711
18.9	0.00819	0.49467	0.00479	8.2E+3	1.711
19	0.00811	0.49462	0.00474	8.4E+3	1.711
19.1	0.00802	0.49457	0.00469	8.6E+3	1.711

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
19.2	0.00794	0.49452	0.00464	8.8E+3	1.711
19.3	0.00786	0.49447	0.00459	9.1E+3	1.711
19.4	0.00778	0.49442	0.00455	9.3E+3	1.711
19.5	0.0077	0.49438	0.0045	9.5E+3	1.711
19.6	0.00762	0.49433	0.00445	9.8E+3	1.711
19.7	0.00754	0.49429	0.00441	1.0E+4	1.711
19.8	0.00747	0.49424	0.00436	1.0E+4	1.711
19.9	0.00739	0.4942	0.00432	1.1E+4	1.711
2	0.00732	0.49415	0.00428	1.1E+4	1.711
20.1	0.00725	0.49411	0.00424	1.1E+4	1.711
20.2	0.00718	0.49407	0.00419	1.1E+4	1.711
20.3	0.00711	0.49402	0.00415	1.2E+4	1.711
20.4	0.00704	0.49398	0.00411	1.2E+4	1.711
20.5	0.00697	0.49394	0.00407	1.2E+4	1.711
20.6	0.0069	0.4939	0.00403	1.3E+4	1.711
20.7	0.00684	0.49386	0.00399	1.3E+4	1.711
20.8	0.00677	0.49382	0.00396	1.3E+4	1.711
20.9	0.00671	0.49379	0.00392	1.3E+4	1.711
21	0.00664	0.49375	0.00388	1.4E+4	1.712
21.1	0.00658	0.49371	0.00384	1.4E+4	1.712
21.2	0.00652	0.49367	0.00381	1.4E+4	1.712
21.3	0.00646	0.49364	0.00377	1.5E+4	1.712
21.4	0.0064	0.4936	0.00374	1.5E+4	1.712
21.5	0.00634	0.49357	0.0037	1.5E+4	1.712
21.6	0.00628	0.49353	0.00367	1.6E+4	1.712
21.7	0.00622	0.4935	0.00364	1.6E+4	1.712
21.8	0.00617	0.49346	0.0036	1.7E+4	1.712
21.9	0.00611	0.49343	0.00357	1.7E+4	1.712
22	0.00605	0.4934	0.00354	1.7E+4	1.712
22.1	0.006	0.49337	0.0035	1.8E+4	1.712
22.2	0.00595	0.49333	0.00347	1.8E+4	1.712
22.3	0.00589	0.4933	0.00344	1.8E+4	1.712
22.4	0.00584	0.49327	0.00341	1.9E+4	1.712

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
22.5	0.00579	0.49324	0.00338	$1.9E+4$	1.712
22.6	0.00574	0.49321	0.00335	$2.0E+4$	1.712
22.7	0.00569	0.49318	0.00332	$2.0E+4$	1.712
22.8	0.00564	0.49315	0.00329	$2.1E+4$	1.712
22.9	0.00559	0.49312	0.00326	$2.1E+4$	1.712
23	0.00554	0.49309	0.00324	$2.2E+4$	1.712
23.1	0.00549	0.49306	0.00321	$2.2E+4$	1.712
23.2	0.00545	0.49304	0.00318	$2.2E+4$	1.712
23.3	0.0054	0.49301	0.00315	$2.3E+4$	1.712
23.4	0.00535	0.49298	0.00313	$2.3E+4$	1.712
23.5	0.00531	0.49295	0.0031	$2.4E+4$	1.712
23.6	0.00526	0.49293	0.00307	$2.4E+4$	1.712
23.7	0.00522	0.4929	0.00305	$2.5E+4$	1.712
23.8	0.00518	0.49288	0.00302	$2.5E+4$	1.712
23.9	0.00513	0.49285	0.003	$2.6E+4$	1.712
24	0.00509	0.49282	0.00297	$2.7E+4$	1.712
24.1	0.00505	0.4928	0.00295	$2.7E+4$	1.712
24.2	0.00501	0.49277	0.00292	$2.8E+4$	1.712
24.3	0.00496	0.49275	0.0029	$2.8E+4$	1.712
24.4	0.00492	0.49273	0.00288	$2.9E+4$	1.712
24.5	0.00488	0.4927	0.00285	$2.9E+4$	1.712
24.6	0.00484	0.49268	0.00283	$3.0E+4$	1.712
24.7	0.00481	0.49266	0.00281	$3.1E+4$	1.712
24.8	0.00477	0.49263	0.00278	$3.1E+4$	1.712
24.9	0.00473	0.49261	0.00276	$3.2E+4$	1.712
25	0.00469	0.49259	0.00274	$3.2E+4$	1.712
25.1	0.00465	0.49257	0.00272	$3.3E+4$	1.712
25.2	0.00462	0.49254	0.0027	$3.4E+4$	1.712
25.3	0.00458	0.49252	0.00268	$3.4E+4$	1.712
25.4	0.00455	0.4925	0.00265	$3.5E+4$	1.712
25.5	0.00451	0.49248	0.00263	$3.6E+4$	1.712
25.6	0.00447	0.49246	0.00261	$3.7E+4$	1.712
25.7	0.00444	0.49244	0.00259	$3.7E+4$	1.712

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
25.8	0.00441	0.49242	0.00257	3.8E+4	1.712
25.9	0.00437	0.4924	0.00255	3.9E+4	1.712
26	0.00434	0.49238	0.00253	3.9E+4	1.712
26.1	0.00431	0.49236	0.00251	4.0E+4	1.712
26.2	0.00427	0.49234	0.00249	4.1E+4	1.713
26.3	0.00424	0.49232	0.00248	4.2E+4	1.713
26.4	0.00421	0.4923	0.00246	4.3E+4	1.713
26.5	0.00418	0.49228	0.00244	4.3E+4	1.713
26.6	0.00415	0.49226	0.00242	4.4E+4	1.713
26.7	0.00411	0.49224	0.0024	4.5E+4	1.713
26.8	0.00408	0.49223	0.00238	4.6E+4	1.713
26.9	0.00405	0.49221	0.00237	4.7E+4	1.713
27	0.00402	0.49219	0.00235	4.8E+4	1.713
27.1	0.00399	0.49217	0.00233	4.8E+4	1.713
27.2	0.00396	0.49216	0.00231	4.9E+4	1.713
27.3	0.00394	0.49214	0.0023	5.0E+4	1.713
27.4	0.00391	0.49212	0.00228	5.1E+4	1.713
27.5	0.00388	0.4921	0.00226	5.2E+4	1.713
27.6	0.00385	0.49209	0.00225	5.3E+4	1.713
27.7	0.00382	0.49207	0.00223	5.4E+4	1.713
27.8	0.0038	0.49205	0.00222	5.5E+4	1.713
27.9	0.00377	0.49204	0.0022	5.6E+4	1.713
28	0.00374	0.49202	0.00218	5.7E+4	1.713
28.1	0.00372	0.49201	0.00217	5.8E+4	1.713
28.2	0.00369	0.49199	0.00215	5.9E+4	1.713
28.3	0.00366	0.49198	0.00214	6.0E+4	1.713
28.4	0.00364	0.49196	0.00212	6.1E+4	1.713
28.5	0.00361	0.49195	0.00211	6.2E+4	1.713
28.6	0.00359	0.49193	0.00209	6.3E+4	1.713
28.7	0.00356	0.49192	0.00208	6.4E+4	1.713
28.8	0.00354	0.4919	0.00207	6.6E+4	1.713
28.9	0.00351	0.49189	0.00205	6.7E+4	1.713
29	0.00349	0.49187	0.00204	6.8E+4	1.713

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
29.1	0.00346	0.49186	0.00202	$6.9E{+}4$	1.713
29.2	0.00344	0.49184	0.00201	$7.0E{+}4$	1.713
29.3	0.00342	0.49183	0.002	$7.1E{+}4$	1.713
29.4	0.00339	0.49182	0.00198	$7.3E{+}4$	1.713
29.5	0.00337	0.4918	0.00197	$7.4E{+}4$	1.713
29.6	0.00335	0.49179	0.00195	$7.5E{+}4$	1.713
29.7	0.00333	0.49178	0.00194	$7.6E{+}4$	1.713
29.8	0.0033	0.49176	0.00193	$7.8E{+}4$	1.713
29.9	0.00328	0.49175	0.00192	$7.9E{+}4$	1.713
3	0.00326	0.49174	0.0019	$8.0E{+}4$	1.713
30.1	0.00324	0.49172	0.00189	$8.2E{+}4$	1.713
30.2	0.00322	0.49171	0.00188	$8.3E{+}4$	1.713
30.3	0.0032	0.4917	0.00187	$8.4E{+}4$	1.713
30.4	0.00318	0.49169	0.00185	$8.6E{+}4$	1.713
30.5	0.00315	0.49167	0.00184	$8.7E{+}4$	1.713
30.6	0.00313	0.49166	0.00183	$8.8E{+}4$	1.713
30.7	0.00311	0.49165	0.00182	$9.0E{+}4$	1.713
30.8	0.00309	0.49164	0.00181	$9.1E{+}4$	1.713
30.9	0.00307	0.49162	0.00179	$9.3E{+}4$	1.713
31	0.00305	0.49161	0.00178	$9.4E{+}4$	1.713
31.1	0.00303	0.4916	0.00177	$9.6E{+}4$	1.713
31.2	0.00301	0.49159	0.00176	$9.7E{+}4$	1.713
31.3	0.003	0.49158	0.00175	$9.9E{+}4$	1.713
31.4	0.00298	0.49157	0.00174	$1.0E{+}5$	1.713
31.5	0.00296	0.49156	0.00173	$1.0E{+}5$	1.713
31.6	0.00294	0.49154	0.00172	$1.0E{+}5$	1.713
31.7	0.00292	0.49153	0.0017	$1.1E{+}5$	1.713
31.8	0.0029	0.49152	0.00169	$1.1E{+}5$	1.713
31.9	0.00288	0.49151	0.00168	$1.1E{+}5$	1.713
32	0.00287	0.4915	0.00167	$1.1E{+}5$	1.713
32.1	0.00285	0.49149	0.00166	$1.1E{+}5$	1.713
32.2	0.00283	0.49148	0.00165	$1.1E{+}5$	1.713
32.3	0.00281	0.49147	0.00164	$1.2E{+}5$	1.713

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
32.4	0.0028	0.49146	0.00163	1.2E+5	1.713
32.5	0.00278	0.49145	0.00162	1.2E+5	1.713
32.6	0.00276	0.49144	0.00161	1.2E+5	1.713
32.7	0.00274	0.49143	0.0016	1.2E+5	1.713
32.8	0.00273	0.49142	0.00159	1.2E+5	1.713
32.9	0.00271	0.49141	0.00158	1.3E+5	1.713
33	0.0027	0.4914	0.00157	1.3E+5	1.713
33.1	0.00268	0.49139	0.00156	1.3E+5	1.713
33.2	0.00266	0.49138	0.00155	1.3E+5	1.713
33.3	0.00265	0.49137	0.00154	1.3E+5	1.713
33.4	0.00263	0.49136	0.00154	1.4E+5	1.713
33.5	0.00262	0.49135	0.00153	1.4E+5	1.713
33.6	0.0026	0.49134	0.00152	1.4E+5	1.713
33.7	0.00258	0.49133	0.00151	1.4E+5	1.713
33.8	0.00257	0.49132	0.0015	1.5E+5	1.713
33.9	0.00255	0.49132	0.00149	1.5E+5	1.713
34	0.00254	0.49131	0.00148	1.5E+5	1.713
34.1	0.00252	0.4913	0.00147	1.5E+5	1.713
34.2	0.00251	0.49129	0.00146	1.5E+5	1.713
34.3	0.00249	0.49128	0.00146	1.6E+5	1.713
34.4	0.00248	0.49127	0.00145	1.6E+5	1.713
34.5	0.00247	0.49126	0.00144	1.6E+5	1.713
34.6	0.00245	0.49126	0.00143	1.6E+5	1.713
34.7	0.00244	0.49125	0.00142	1.7E+5	1.713
34.8	0.00242	0.49124	0.00141	1.7E+5	1.713
34.9	0.00241	0.49123	0.00141	1.7E+5	1.713
35	0.0024	0.49122	0.0014	1.7E+5	1.713
35.1	0.00238	0.49121	0.00139	1.7E+5	1.713
35.2	0.00237	0.49121	0.00138	1.8E+5	1.713
35.3	0.00236	0.4912	0.00137	1.8E+5	1.713
35.4	0.00234	0.49119	0.00137	1.8E+5	1.713
35.5	0.00233	0.49118	0.00136	1.9E+5	1.713
35.6	0.00232	0.49117	0.00135	1.9E+5	1.713

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
35.7	0.0023	0.49117	0.00134	1.9E+5	1.713
35.8	0.00229	0.49116	0.00134	1.9E+5	1.713
35.9	0.00228	0.49115	0.00133	2.0E+5	1.713
36	0.00227	0.49114	0.00132	2.0E+5	1.713
36.1	0.00225	0.49114	0.00131	2.0E+5	1.713
36.2	0.00224	0.49113	0.00131	2.0E+5	1.713
36.3	0.00223	0.49112	0.0013	2.1E+5	1.713
36.4	0.00222	0.49111	0.00129	2.1E+5	1.713
36.5	0.0022	0.49111	0.00129	2.1E+5	1.713
36.6	0.00219	0.4911	0.00128	2.2E+5	1.713
36.7	0.00218	0.49109	0.00127	2.2E+5	1.713
36.8	0.00217	0.49109	0.00127	2.2E+5	1.713
36.9	0.00216	0.49108	0.00126	2.2E+5	1.713
37	0.00214	0.49107	0.00125	2.3E+5	1.713
37.1	0.00213	0.49107	0.00124	2.3E+5	1.713
37.2	0.00212	0.49106	0.00124	2.3E+5	1.713
37.3	0.00211	0.49105	0.00123	2.4E+5	1.713
37.4	0.0021	0.49105	0.00122	2.4E+5	1.713
37.5	0.00209	0.49104	0.00122	2.4E+5	1.713
37.6	0.00208	0.49103	0.00121	2.5E+5	1.713
37.7	0.00207	0.49103	0.00121	2.5E+5	1.713
37.8	0.00205	0.49102	0.0012	2.5E+5	1.713
37.9	0.00204	0.49101	0.00119	2.6E+5	1.713
38	0.00203	0.49101	0.00119	2.6E+5	1.713
38.1	0.00202	0.491	0.00118	2.6E+5	1.713
38.2	0.00201	0.49099	0.00117	2.7E+5	1.713
38.3	0.002	0.49099	0.00117	2.7E+5	1.713
38.4	0.00199	0.49098	0.00116	2.7E+5	1.713
38.5	0.00198	0.49097	0.00116	2.8E+5	1.713
38.6	0.00197	0.49097	0.00115	2.8E+5	1.713
38.7	0.00196	0.49096	0.00114	2.8E+5	1.713
38.8	0.00195	0.49096	0.00114	2.9E+5	1.713
38.9	0.00194	0.49095	0.00113	2.9E+5	1.713

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
39	0.00193	0.49094	0.00113	3.0E+5	1.713
39.1	0.00192	0.49094	0.00112	3.0E+5	1.713
39.2	0.00191	0.49093	0.00112	3.0E+5	1.713
39.3	0.0019	0.49093	0.00111	3.1E+5	1.713
39.4	0.00189	0.49092	0.0011	3.1E+5	1.713
39.5	0.00188	0.49092	0.0011	3.1E+5	1.714
39.6	0.00187	0.49091	0.00109	3.2E+5	1.714
39.7	0.00186	0.4909	0.00109	3.2E+5	1.714
39.8	0.00185	0.4909	0.00108	3.3E+5	1.714
39.9	0.00184	0.49089	0.00108	3.3E+5	1.714
4	0.00184	0.49089	0.00107	3.4E+5	1.714
40.1	0.00183	0.49088	0.00107	3.4E+5	1.714
40.2	0.00182	0.49088	0.00106	3.4E+5	1.714
40.3	0.00181	0.49087	0.00106	3.5E+5	1.714
40.4	0.0018	0.49087	0.00105	3.5E+5	1.714
40.5	0.00179	0.49086	0.00104	3.6E+5	1.714
40.6	0.00178	0.49086	0.00104	3.6E+5	1.714
40.7	0.00177	0.49085	0.00103	3.7E+5	1.714
40.8	0.00176	0.49085	0.00103	3.7E+5	1.714
40.9	0.00176	0.49084	0.00102	3.7E+5	1.714
41	0.00175	0.49084	0.00102	3.8E+5	1.714
41.1	0.00174	0.49083	0.00101	3.8E+5	1.714
41.2	0.00173	0.49083	0.00101	3.9E+5	1.714
41.3	0.00172	0.49082	0.001	3.9E+5	1.714
41.4	0.00171	0.49082	0.001	4.0E+5	1.714
41.5	0.0017	0.49081	0.000995	4.0E+5	1.714
41.6	0.0017	0.49081	0.00099	4.1E+5	1.714
41.7	0.00169	0.4908	0.000985	4.1E+5	1.714
41.8	0.00168	0.4908	0.000981	4.2E+5	1.714
41.9	0.00167	0.49079	0.000976	4.2E+5	1.714
42	0.00166	0.49079	0.000971	4.3E+5	1.714
42.1	0.00166	0.49078	0.000967	4.3E+5	1.714
42.2	0.00165	0.49078	0.000962	4.4E+5	1.714

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
42.3	0.00164	0.49077	0.000958	4.4E+5	1.714
42.4	0.00163	0.49077	0.000953	4.5E+5	1.714
42.5	0.00163	0.49076	0.000949	4.5E+5	1.714
42.6	0.00162	0.49076	0.000944	4.6E+5	1.714
42.7	0.00161	0.49075	0.00094	4.6E+5	1.714
42.8	0.0016	0.49075	0.000935	4.7E+5	1.714
42.9	0.0016	0.49075	0.000931	4.8E+5	1.714
43	0.00159	0.49074	0.000927	4.8E+5	1.714
43.1	0.00158	0.49074	0.000922	4.9E+5	1.714
43.2	0.00157	0.49073	0.000918	4.9E+5	1.714
43.3	0.00157	0.49073	0.000914	5.0E+5	1.714
43.4	0.00156	0.49072	0.00091	5.0E+5	1.714
43.5	0.00155	0.49072	0.000906	5.1E+5	1.714
43.6	0.00154	0.49072	0.000901	5.2E+5	1.714
43.7	0.00154	0.49071	0.000897	5.2E+5	1.714
43.8	0.00153	0.49071	0.000893	5.3E+5	1.714
43.9	0.00152	0.4907	0.000889	5.3E+5	1.714
44	0.00152	0.4907	0.000885	5.4E+5	1.714
44.1	0.00151	0.49069	0.000881	5.5E+5	1.714
44.2	0.0015	0.49069	0.000877	5.5E+5	1.714
44.3	0.0015	0.49069	0.000873	5.6E+5	1.714
44.4	0.00149	0.49068	0.000869	5.6E+5	1.714
44.5	0.00148	0.49068	0.000865	5.7E+5	1.714
44.6	0.00148	0.49067	0.000862	5.8E+5	1.714
44.7	0.00147	0.49067	0.000858	5.8E+5	1.714
44.8	0.00146	0.49067	0.000854	5.9E+5	1.714
44.9	0.00146	0.49066	0.00085	6.0E+5	1.714
45	0.00145	0.49066	0.000846	6.0E+5	1.714
45.1	0.00144	0.49066	0.000843	6.1E+5	1.714
45.2	0.00144	0.49065	0.000839	6.2E+5	1.714
45.3	0.00143	0.49065	0.000835	6.2E+5	1.714
45.4	0.00142	0.49064	0.000831	6.3E+5	1.714
45.5	0.00142	0.49064	0.000828	6.4E+5	1.714

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
45.6	0.00141	0.49064	0.000824	6.4E+5	1.714
45.7	0.00141	0.49063	0.000821	6.5E+5	1.714
45.8	0.0014	0.49063	0.000817	6.6E+5	1.714
45.9	0.00139	0.49063	0.000813	6.7E+5	1.714
46	0.00139	0.49062	0.00081	6.7E+5	1.714
46.1	0.00138	0.49062	0.000806	6.8E+5	1.714
46.2	0.00138	0.49061	0.000803	6.9E+5	1.714
46.3	0.00137	0.49061	0.000799	6.9E+5	1.714
46.4	0.00136	0.49061	0.000796	7.0E+5	1.714
46.5	0.00136	0.4906	0.000793	7.1E+5	1.714
46.6	0.00135	0.4906	0.000789	7.2E+5	1.714
46.7	0.00135	0.4906	0.000786	7.3E+5	1.714
46.8	0.00134	0.49059	0.000782	7.3E+5	1.714
46.9	0.00134	0.49059	0.000779	7.4E+5	1.714
47	0.00133	0.49059	0.000776	7.5E+5	1.714
47.1	0.00132	0.49058	0.000773	7.6E+5	1.714
47.2	0.00132	0.49058	0.000769	7.6E+5	1.714
47.3	0.00131	0.49058	0.000766	7.7E+5	1.714
47.4	0.00131	0.49057	0.000763	7.8E+5	1.714
47.5	0.0013	0.49057	0.00076	7.9E+5	1.714
47.6	0.0013	0.49057	0.000756	8.0E+5	1.714
47.7	0.00129	0.49056	0.000753	8.1E+5	1.714
47.8	0.00129	0.49056	0.00075	8.1E+5	1.714
47.9	0.00128	0.49056	0.000747	8.2E+5	1.714
48	0.00127	0.49055	0.000744	8.3E+5	1.714
48.1	0.00127	0.49055	0.000741	8.4E+5	1.714
48.2	0.00126	0.49055	0.000738	8.5E+5	1.714
48.3	0.00126	0.49055	0.000735	8.6E+5	1.714
48.4	0.00125	0.49054	0.000732	8.7E+5	1.714
48.5	0.00125	0.49054	0.000729	8.8E+5	1.714
48.6	0.00124	0.49054	0.000726	8.8E+5	1.714
48.7	0.00124	0.49053	0.000723	8.9E+5	1.714
48.8	0.00123	0.49053	0.00072	9.0E+5	1.714

Table 6.3: Rayleigh Flow Table for k=1.4 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
48.9	0.00123	0.49053	0.000717	9.1E+5	1.714
49	0.00122	0.49052	0.000714	9.2E+5	1.714
49.1	0.00122	0.49052	0.000711	9.3E+5	1.714
49.2	0.00121	0.49052	0.000708	9.4E+5	1.714
49.3	0.00121	0.49052	0.000705	9.5E+5	1.714
49.4	0.0012	0.49051	0.000702	9.6E+5	1.714
49.5	0.0012	0.49051	0.000699	9.7E+5	1.714
49.6	0.00119	0.49051	0.000697	9.8E+5	1.714
49.7	0.00119	0.4905	0.000694	9.9E+5	1.714
49.8	0.00118	0.4905	0.000691	1.0E+6	1.714
49.9	0.00118	0.4905	0.000688	1.0E+6	1.714
50.0	0.00117	0.4905	0.000686	1.0E+6	1.714

6.4 Rayleigh Flow Table for k=1.67

Table 6.4: Rayleigh Flow Table for k=1.67

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
0.01	0.000713	0.000534	2.67	1.299	0.000267
0.02	0.00285	0.00213	2.668	1.299	0.00107
0.03	0.0064	0.00479	2.666	1.298	0.0024
0.04	0.011346	0.0085	2.663	1.298	0.00426
0.05	0.017674	0.01325	2.659	1.297	0.00665
0.06	0.025358	0.019018	2.654	1.296	0.00955
0.07	0.034367	0.025785	2.648	1.294	0.012977
0.08	0.044665	0.033529	2.642	1.293	0.016907
0.09	0.056213	0.042221	2.634	1.291	0.021338
0.1	0.068966	0.051833	2.626	1.289	0.026261
0.11	0.082876	0.062331	2.617	1.287	0.031667
0.12	0.097891	0.073681	2.607	1.284	0.037545
0.13	0.11396	0.085843	2.597	1.282	0.043884
0.14	0.13101	0.098779	2.585	1.279	0.050673

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
0.15	0.14899	0.11245	2.573	1.276	0.057899
0.16	0.16784	0.1268	2.561	1.273	0.06555
0.17	0.18749	0.1418	2.547	1.27	0.07361
0.18	0.20787	0.1574	2.533	1.266	0.082067
0.19	0.22892	0.17355	2.518	1.263	0.090907
0.2	0.25056	0.1902	2.503	1.259	0.10011
0.21	0.27273	0.20731	2.487	1.255	0.10967
0.22	0.29536	0.22483	2.47	1.251	0.11956
0.23	0.31838	0.24271	2.453	1.247	0.12978
0.24	0.34172	0.26091	2.436	1.243	0.1403
0.25	0.36532	0.27937	2.418	1.239	0.1511
0.26	0.3891	0.29806	2.399	1.235	0.16218
0.27	0.41301	0.31693	2.38	1.23	0.17352
0.28	0.43699	0.33593	2.361	1.226	0.18509
0.29	0.46097	0.35502	2.341	1.221	0.19689
0.3	0.48489	0.37416	2.321	1.216	0.2089
0.31	0.5087	0.39332	2.301	1.212	0.2211
0.32	0.53236	0.41245	2.28	1.207	0.23348
0.33	0.5558	0.43152	2.259	1.202	0.24602
0.34	0.57898	0.45049	2.238	1.197	0.25871
0.35	0.60185	0.46933	2.217	1.192	0.27153
0.36	0.62438	0.48801	2.195	1.188	0.28446
0.37	0.64653	0.5065	2.173	1.183	0.29751
0.38	0.66826	0.52478	2.151	1.178	0.31064
0.39	0.68953	0.54282	2.129	1.173	0.32385
0.4	0.71032	0.56059	2.107	1.168	0.33712
0.41	0.7306	0.57808	2.085	1.163	0.35045
0.42	0.75034	0.59527	2.062	1.158	0.36381
0.43	0.76953	0.61213	2.04	1.153	0.37721
0.44	0.78814	0.62866	2.018	1.148	0.39062
0.45	0.80616	0.64483	1.995	1.144	0.40404
0.46	0.82358	0.66064	1.973	1.139	0.41746
0.47	0.84037	0.67608	1.95	1.134	0.43086

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
0.48	0.85655	0.69113	1.928	1.129	0.44424
0.49	0.87209	0.70579	1.906	1.125	0.45759
0.5	0.88699	0.72005	1.884	1.12	0.4709
0.51	0.90124	0.73391	1.861	1.116	0.48416
0.52	0.91486	0.74736	1.839	1.111	0.49737
0.53	0.92783	0.76041	1.817	1.107	0.51052
0.54	0.94017	0.77304	1.796	1.102	0.5236
0.55	0.95186	0.78526	1.774	1.098	0.5366
0.56	0.96293	0.79707	1.752	1.094	0.54952
0.57	0.97336	0.80847	1.731	1.09	0.56236
0.58	0.98318	0.81946	1.71	1.086	0.5751
0.59	0.99239	0.83005	1.688	1.082	0.58775
0.6	1.001	0.84024	1.667	1.078	0.6003
0.61	1.009	0.85003	1.647	1.074	0.61274
0.62	1.016	0.85943	1.626	1.07	0.62508
0.63	1.023	0.86845	1.606	1.067	0.6373
0.64	1.03	0.87709	1.585	1.063	0.64941
0.65	1.035	0.88535	1.565	1.06	0.6614
0.66	1.041	0.89325	1.546	1.056	0.67328
0.67	1.045	0.90079	1.526	1.053	0.68503
0.68	1.05	0.90798	1.507	1.05	0.69665
0.69	1.053	0.91482	1.487	1.047	0.70815
0.7	1.057	0.92133	1.468	1.044	0.71952
0.71	1.059	0.92751	1.45	1.041	0.73076
0.71709	1.061	0.9317	1.436	1.039	0.73865
0.72418	1.063	0.93573	1.423	1.037	0.74648
0.73127	1.064	0.9396	1.41	1.035	0.75424
0.73837	1.065	0.94332	1.398	1.033	0.76193
0.74546	1.066	0.9469	1.385	1.031	0.76956
0.75255	1.066	0.95033	1.372	1.03	0.77712
0.75964	1.067	0.95361	1.36	1.028	0.78462
0.76673	1.067	0.95675	1.347	1.026	0.79204
0.77382	1.067	0.95976	1.335	1.025	0.7994

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{{T_0}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho^*}{\rho}$
0.81	1.065	0.97307	1.274	1.017	0.8359
0.82	1.064	0.97619	1.258	1.016	0.84568
0.83	1.062	0.97907	1.242	1.014	0.85533
0.84	1.06	0.98174	1.226	1.012	0.86485
0.85	1.058	0.98418	1.21	1.011	0.87424
0.86	1.055	0.98643	1.195	1.009	0.8835
0.87	1.053	0.98847	1.179	1.008	0.89262
0.88	1.05	0.99032	1.164	1.007	0.90162
0.89	1.047	0.99199	1.149	1.006	0.9105
0.9	1.043	0.99348	1.135	1.005	0.91924
0.91	1.04	0.9948	1.12	1.004	0.92786
0.92	1.036	0.99595	1.106	1.003	0.93636
0.93	1.032	0.99695	1.092	1.002	0.94473
0.94	1.028	0.99779	1.079	1.002	0.95298
0.95	1.024	0.99849	1.065	1.001	0.96111
0.96	1.019	0.99905	1.052	1.001	0.96912
0.97	1.015	0.99947	1.038	1	0.97702
0.98	1.01	0.99977	1.025	1	0.98479
0.99	1.005	0.99994	1.013	1	0.99245
1	1	1	1	1	1
1.01	0.99493	0.99994	0.98758	1	1.007
1.02	0.98975	0.99978	0.97535	1	1.015
1.03	0.98447	0.99952	0.96331	1	1.022
1.04	0.97911	0.99915	0.95144	1.001	1.029
1.05	0.97366	0.9987	0.93975	1.001	1.036
1.06	0.96813	0.99815	0.92824	1.002	1.043
1.07	0.96253	0.99752	0.9169	1.002	1.05
1.08	0.95686	0.99681	0.90573	1.003	1.056
1.09	0.95113	0.99603	0.89473	1.004	1.063
1.1	0.94535	0.99517	0.8839	1.005	1.07
1.11	0.93952	0.99424	0.87323	1.006	1.076
1.12	0.93364	0.99324	0.86272	1.007	1.082
1.13	0.92772	0.99219	0.85238	1.008	1.088

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
1.14	0.92177	0.99107	0.84218	1.009	1.095
1.15	0.91579	0.9899	0.83215	1.01	1.101
1.16	0.90977	0.98867	0.82226	1.012	1.106
1.17	0.90374	0.9874	0.81252	1.013	1.112
1.18	0.89768	0.98608	0.80293	1.015	1.118
1.19	0.89161	0.98471	0.79349	1.016	1.124
1.2	0.88553	0.9833	0.78419	1.018	1.129
1.01	0.99493	0.99994	0.98758	1	1.007
1.02	0.98975	0.99978	0.97535	1	1.015
1.03	0.98447	0.99952	0.96331	1	1.022
1.04	0.97911	0.99915	0.95144	1.001	1.029
1.05	0.97366	0.9987	0.93975	1.001	1.036
1.06	0.96813	0.99815	0.92824	1.002	1.043
1.07	0.96253	0.99752	0.9169	1.002	1.05
1.08	0.95686	0.99681	0.90573	1.003	1.056
1.09	0.95113	0.99603	0.89473	1.004	1.063
1.1	0.94535	0.99517	0.8839	1.005	1.07
1.11	0.93952	0.99424	0.87323	1.006	1.076
1.12	0.93364	0.99324	0.86272	1.007	1.082
1.13	0.92772	0.99219	0.85238	1.008	1.088
1.14	0.92177	0.99107	0.84218	1.009	1.095
1.15	0.91579	0.9899	0.83215	1.01	1.101
1.16	0.90977	0.98867	0.82226	1.012	1.106
1.17	0.90374	0.9874	0.81252	1.013	1.112
1.18	0.89768	0.98608	0.80293	1.015	1.118
1.19	0.89161	0.98471	0.79349	1.016	1.124
1.2	0.88553	0.9833	0.78419	1.018	1.129
1.21	0.87943	0.98185	0.77503	1.02	1.135
1.22	0.87333	0.98037	0.766	1.022	1.14
1.23	0.86723	0.97885	0.75712	1.024	1.145
1.24	0.86113	0.9773	0.74836	1.026	1.151
1.25	0.85502	0.97571	0.73974	1.028	1.156
1.26	0.84893	0.9741	0.73125	1.03	1.161

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
1.27	0.84284	0.97246	0.72288	1.033	1.166
1.28	0.83676	0.9708	0.71464	1.035	1.171
1.29	0.83069	0.96912	0.70653	1.037	1.176
1.3	0.82463	0.96741	0.69853	1.04	1.181
1.31	0.81859	0.96569	0.69066	1.043	1.185
1.32	0.81257	0.96395	0.6829	1.045	1.19
1.33	0.80656	0.96219	0.67525	1.048	1.194
1.34	0.80058	0.96041	0.66773	1.051	1.199
1.35	0.79462	0.95862	0.66031	1.054	1.203
1.36	0.78868	0.95683	0.653	1.057	1.208
1.37	0.78277	0.95501	0.6458	1.06	1.212
1.38	0.77688	0.95319	0.6387	1.063	1.216
1.39	0.77102	0.95137	0.63171	1.067	1.221
1.4	0.7652	0.94953	0.62482	1.07	1.225
1.41	0.75939	0.94769	0.61804	1.073	1.229
1.42	0.75363	0.94584	0.61135	1.077	1.233
1.43	0.74789	0.94399	0.60476	1.081	1.237
1.44	0.74218	0.94213	0.59826	1.084	1.241
1.45	0.73651	0.94027	0.59186	1.088	1.244
1.46	0.73087	0.93841	0.58556	1.092	1.248
1.47	0.72527	0.93655	0.57934	1.096	1.252
1.48	0.7197	0.93469	0.57321	1.1	1.256
1.49	0.71417	0.93283	0.56717	1.104	1.259
1.5	0.70868	0.93097	0.56122	1.108	1.263
1.51	0.70322	0.92911	0.55535	1.112	1.266
1.52	0.6978	0.92725	0.54957	1.116	1.27
1.53	0.69241	0.9254	0.54387	1.121	1.273
1.54	0.68707	0.92355	0.53824	1.125	1.277
1.55	0.68176	0.9217	0.5327	1.13	1.28
1.56	0.6765	0.91986	0.52724	1.134	1.283
1.57	0.67127	0.91802	0.52185	1.139	1.286
1.58	0.66608	0.91619	0.51654	1.143	1.289
1.59	0.66093	0.91437	0.51131	1.148	1.293

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{{T_0}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho^*}{\rho}$
1.6	0.65582	0.91255	0.50614	1.153	1.296
1.61	0.65075	0.91074	0.50105	1.158	1.299
1.62	0.64572	0.90893	0.49603	1.163	1.302
1.63	0.64073	0.90713	0.49108	1.168	1.305
1.64	0.63578	0.90534	0.48619	1.173	1.308
1.65	0.63087	0.90356	0.48138	1.179	1.311
1.66	0.626	0.90178	0.47663	1.184	1.313
1.67	0.62117	0.90002	0.47194	1.189	1.316
1.68	0.61638	0.89826	0.46732	1.195	1.319
1.69	0.61163	0.89651	0.46276	1.2	1.322
1.7	0.60692	0.89477	0.45827	1.206	1.324
1.71	0.60226	0.89304	0.45383	1.212	1.327
1.72	0.59763	0.89132	0.44945	1.217	1.33
1.73	0.59304	0.88961	0.44514	1.223	1.332
1.74	0.58849	0.88791	0.44088	1.229	1.335
1.75	0.58398	0.88622	0.43668	1.235	1.337
1.76	0.5795	0.88453	0.43253	1.241	1.34
1.77	0.57507	0.88286	0.42844	1.247	1.342
1.78	0.57068	0.8812	0.4244	1.253	1.345
1.79	0.56632	0.87955	0.42042	1.26	1.347
1.8	0.56201	0.87791	0.41648	1.266	1.349
1.81	0.55773	0.87628	0.4126	1.272	1.352
1.82	0.55349	0.87466	0.40878	1.279	1.354
1.83	0.54929	0.87306	0.405	1.285	1.356
1.84	0.54513	0.87146	0.40127	1.292	1.359
1.85	0.541	0.86987	0.39758	1.299	1.361
1.86	0.53691	0.8683	0.39395	1.306	1.363
1.87	0.53286	0.86674	0.39036	1.312	1.365
1.88	0.52885	0.86518	0.38682	1.319	1.367
1.89	0.52487	0.86364	0.38332	1.326	1.369
1.9	0.52093	0.86211	0.37987	1.333	1.371
1.91	0.51703	0.86059	0.37646	1.341	1.373
1.92	0.51316	0.85908	0.3731	1.348	1.375

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
1.93	0.50932	0.85758	0.36978	1.355	1.377
1.94	0.50552	0.8561	0.3665	1.362	1.379
1.95	0.50176	0.85462	0.36326	1.37	1.381
1.96	0.49803	0.85316	0.36006	1.377	1.383
1.97	0.49434	0.85171	0.3569	1.385	1.385
1.98	0.49068	0.85026	0.35378	1.393	1.387
1.99	0.48705	0.84883	0.3507	1.4	1.389
2	0.48346	0.84741	0.34766	1.408	1.391
2.01	0.4799	0.846	0.34465	1.416	1.392
2.02	0.47637	0.8446	0.34168	1.424	1.394
2.03	0.47288	0.84322	0.33875	1.432	1.396
2.04	0.46942	0.84184	0.33585	1.44	1.398
2.05	0.46599	0.84048	0.33299	1.448	1.399
2.06	0.4626	0.83912	0.33017	1.457	1.401
2.07	0.45923	0.83778	0.32738	1.465	1.403
2.08	0.4559	0.83644	0.32462	1.473	1.404
2.09	0.4526	0.83512	0.32189	1.482	1.406
2.1	0.44932	0.83381	0.3192	1.49	1.408
2.11	0.44608	0.83251	0.31654	1.499	1.409
2.12	0.44287	0.83122	0.31391	1.508	1.411
2.13	0.43969	0.82994	0.31131	1.517	1.412
2.14	0.43654	0.82867	0.30874	1.525	1.414
2.15	0.43342	0.82741	0.30621	1.534	1.415
2.16	0.43033	0.82616	0.3037	1.543	1.417
2.17	0.42726	0.82492	0.30122	1.553	1.418
2.18	0.42423	0.82369	0.29877	1.562	1.42
2.19	0.42122	0.82247	0.29635	1.571	1.421
2.2	0.41824	0.82126	0.29396	1.58	1.423
2.21	0.41529	0.82006	0.2916	1.59	1.424
2.22	0.41237	0.81887	0.28926	1.599	1.426
2.23	0.40947	0.81769	0.28695	1.609	1.427
2.24	0.4066	0.81652	0.28467	1.618	1.428
2.25	0.40376	0.81536	0.28241	1.628	1.43

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
2.26	0.40094	0.81421	0.28018	1.638	1.431
2.27	0.39815	0.81307	0.27797	1.648	1.432
2.28	0.39539	0.81194	0.27579	1.658	1.434
2.29	0.39265	0.81082	0.27363	1.668	1.435
2.3	0.38993	0.8097	0.2715	1.678	1.436
2.31	0.38725	0.8086	0.26939	1.688	1.437
2.32	0.38458	0.80751	0.2673	1.698	1.439
2.33	0.38194	0.80642	0.26524	1.709	1.44
2.34	0.37933	0.80535	0.2632	1.719	1.441
2.35	0.37674	0.80428	0.26119	1.729	1.442
2.36	0.37417	0.80322	0.25919	1.74	1.444
2.37	0.37163	0.80217	0.25722	1.751	1.445
2.38	0.36911	0.80113	0.25527	1.761	1.446
2.39	0.36661	0.8001	0.25334	1.772	1.447
2.4	0.36413	0.79908	0.25143	1.783	1.448
2.41	0.36168	0.79806	0.24954	1.794	1.449
2.42	0.35925	0.79706	0.24768	1.805	1.45
2.43	0.35685	0.79606	0.24583	1.816	1.452
2.44	0.35446	0.79507	0.244	1.828	1.453
2.45	0.3521	0.79409	0.24219	1.839	1.454
2.46	0.34976	0.79311	0.24041	1.85	1.455
2.47	0.34743	0.79215	0.23864	1.862	1.456
2.48	0.34513	0.79119	0.23689	1.873	1.457
2.49	0.34286	0.79024	0.23516	1.885	1.458
2.5	0.3406	0.7893	0.23344	1.897	1.459
2.51	0.33836	0.78837	0.23175	1.908	1.46
2.52	0.33614	0.78745	0.23007	1.92	1.461
2.53	0.33394	0.78653	0.22841	1.932	1.462
2.54	0.33176	0.78562	0.22677	1.944	1.463
2.55	0.32961	0.78472	0.22514	1.956	1.464
2.56	0.32747	0.78382	0.22353	1.969	1.465
2.57	0.32535	0.78293	0.22194	1.981	1.466
2.58	0.32324	0.78205	0.22037	1.993	1.467

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
2.59	0.32116	0.78118	0.21881	2.006	1.468
2.6	0.3191	0.78032	0.21726	2.018	1.469
2.61	0.31705	0.77946	0.21574	2.031	1.47
2.62	0.31502	0.77861	0.21422	2.044	1.471
2.63	0.31301	0.77776	0.21273	2.056	1.471
2.64	0.31102	0.77693	0.21125	2.069	1.472
2.65	0.30905	0.7761	0.20978	2.082	1.473
2.66	0.30709	0.77527	0.20833	2.095	1.474
2.67	0.30515	0.77446	0.20689	2.108	1.475
2.68	0.30323	0.77365	0.20547	2.122	1.476
2.69	0.30132	0.77284	0.20406	2.135	1.477
2.7	0.29943	0.77205	0.20267	2.148	1.477
2.71	0.29756	0.77126	0.20129	2.162	1.478
2.72	0.2957	0.77047	0.19992	2.175	1.479
2.73	0.29386	0.7697	0.19857	2.189	1.48
2.74	0.29203	0.76893	0.19723	2.203	1.481
2.75	0.29023	0.76816	0.1959	2.217	1.481
2.76	0.28843	0.7674	0.19459	2.23	1.482
2.77	0.28665	0.76665	0.19329	2.244	1.483
2.78	0.28489	0.7659	0.192	2.259	1.484
2.79	0.28315	0.76517	0.19072	2.273	1.485
2.8	0.28141	0.76443	0.18946	2.287	1.485
2.81	0.2797	0.7637	0.18821	2.301	1.486
2.82	0.27799	0.76298	0.18697	2.316	1.487
2.83	0.2763	0.76227	0.18574	2.33	1.488
2.84	0.27463	0.76156	0.18453	2.345	1.488
2.85	0.27297	0.76085	0.18332	2.36	1.489
2.86	0.27133	0.76015	0.18213	2.374	1.49
2.87	0.26969	0.75946	0.18095	2.389	1.49
2.88	0.26808	0.75877	0.17978	2.404	1.491
2.89	0.26647	0.75809	0.17862	2.419	1.492
2.9	0.26488	0.75741	0.17747	2.435	1.493
2.91	0.2633	0.75674	0.17633	2.45	1.493

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
2.92	0.26174	0.75607	0.17521	2.465	1.494
2.93	0.26019	0.75541	0.17409	2.481	1.495
2.94	0.25865	0.75476	0.17299	2.496	1.495
2.95	0.25713	0.75411	0.17189	2.512	1.496
2.96	0.25561	0.75346	0.1708	2.528	1.497
2.97	0.25411	0.75282	0.16973	2.543	1.497
2.98	0.25263	0.75219	0.16866	2.559	1.498
2.99	0.25115	0.75156	0.16761	2.575	1.498
3	0.24969	0.75093	0.16656	2.591	1.499
3.01	0.24824	0.75032	0.16553	2.607	1.5
3.02	0.2468	0.7497	0.1645	2.624	1.5
3.03	0.24537	0.74909	0.16348	2.64	1.501
3.04	0.24396	0.74848	0.16247	2.657	1.502
3.05	0.24255	0.74788	0.16147	2.673	1.502
3.06	0.24116	0.74729	0.16048	2.69	1.503
3.07	0.23978	0.7467	0.1595	2.707	1.503
3.08	0.23841	0.74611	0.15853	2.723	1.504
3.09	0.23705	0.74553	0.15757	2.74	1.504
3.1	0.2357	0.74495	0.15661	2.757	1.505
3.11	0.23437	0.74438	0.15566	2.775	1.506
3.12	0.23304	0.74381	0.15472	2.792	1.506
3.13	0.23172	0.74325	0.15379	2.809	1.507
3.14	0.23042	0.74269	0.15287	2.827	1.507
3.15	0.22912	0.74213	0.15196	2.844	1.508
3.16	0.22784	0.74158	0.15105	2.862	1.508
3.17	0.22657	0.74103	0.15015	2.879	1.509
3.18	0.2253	0.74049	0.14926	2.897	1.509
3.19	0.22405	0.73995	0.14838	2.915	1.51
3.2	0.22281	0.73942	0.14751	2.933	1.51
3.21	0.22157	0.73889	0.14664	2.951	1.511
3.22	0.22035	0.73836	0.14578	2.969	1.512
3.23	0.21913	0.73784	0.14493	2.988	1.512
3.24	0.21793	0.73732	0.14408	3.006	1.513

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
3.25	0.21673	0.7368	0.14325	3.025	1.513
3.26	0.21555	0.73629	0.14241	3.043	1.514
3.27	0.21437	0.73579	0.14159	3.062	1.514
3.28	0.2132	0.73528	0.14077	3.081	1.515
3.29	0.21205	0.73478	0.13996	3.1	1.515
3.3	0.2109	0.73429	0.13916	3.119	1.515
3.31	0.20976	0.7338	0.13837	3.138	1.516
3.32	0.20862	0.73331	0.13758	3.157	1.516
3.33	0.2075	0.73282	0.13679	3.176	1.517
3.34	0.20639	0.73234	0.13602	3.196	1.517
3.35	0.20528	0.73187	0.13525	3.215	1.518
3.36	0.20418	0.73139	0.13448	3.235	1.518
3.37	0.20309	0.73092	0.13373	3.255	1.519
3.38	0.20201	0.73046	0.13298	3.274	1.519
3.39	0.20094	0.72999	0.13223	3.294	1.52
3.4	0.19988	0.72953	0.13149	3.314	1.52
3.41	0.19882	0.72908	0.13076	3.335	1.521
3.42	0.19777	0.72862	0.13003	3.355	1.521
3.43	0.19673	0.72817	0.12931	3.375	1.521
3.44	0.1957	0.72773	0.1286	3.396	1.522
3.45	0.19468	0.72729	0.12789	3.416	1.522
3.46	0.19366	0.72685	0.12719	3.437	1.523
3.47	0.19265	0.72641	0.12649	3.458	1.523
3.48	0.19165	0.72598	0.1258	3.478	1.523
3.49	0.19066	0.72554	0.12511	3.499	1.524
3.5	0.18967	0.72512	0.12443	3.521	1.524
3.51	0.18869	0.72469	0.12376	3.542	1.525
3.52	0.18772	0.72427	0.12309	3.563	1.525
3.53	0.18676	0.72385	0.12242	3.584	1.525
3.54	0.1858	0.72344	0.12176	3.606	1.526
3.55	0.18485	0.72303	0.12111	3.628	1.526
3.56	0.1839	0.72262	0.12046	3.649	1.527
3.57	0.18297	0.72221	0.11982	3.671	1.527

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
3.58	0.18204	0.72181	0.11918	3.693	1.527
3.59	0.18111	0.72141	0.11854	3.715	1.528
3.6	0.1802	0.72101	0.11792	3.737	1.528
3.61	0.17929	0.72062	0.11729	3.76	1.529
3.62	0.17839	0.72022	0.11667	3.782	1.529
3.63	0.17749	0.71984	0.11606	3.804	1.529
3.64	0.1766	0.71945	0.11545	3.827	1.53
3.65	0.17572	0.71907	0.11485	3.85	1.53
3.66	0.17484	0.71868	0.11425	3.873	1.53
3.67	0.17397	0.71831	0.11365	3.895	1.531
3.68	0.17311	0.71793	0.11306	3.919	1.531
3.69	0.17225	0.71756	0.11247	3.942	1.531
3.7	0.1714	0.71719	0.11189	3.965	1.532
3.71	0.17055	0.71682	0.11131	3.988	1.532
3.72	0.16971	0.71645	0.11074	4.012	1.532
3.73	0.16888	0.71609	0.11017	4.035	1.533
3.74	0.16805	0.71573	0.10961	4.059	1.533
3.75	0.16723	0.71537	0.10905	4.083	1.534
3.76	0.16641	0.71502	0.10849	4.107	1.534
3.77	0.1656	0.71467	0.10794	4.131	1.534
3.78	0.1648	0.71432	0.10739	4.155	1.534
3.79	0.164	0.71397	0.10685	4.179	1.535
3.8	0.1632	0.71362	0.10631	4.204	1.535
3.81	0.16242	0.71328	0.10578	4.228	1.535
3.82	0.16163	0.71294	0.10525	4.253	1.536
3.83	0.16086	0.7126	0.10472	4.278	1.536
3.84	0.16009	0.71226	0.10419	4.303	1.536
3.85	0.15932	0.71193	0.10367	4.328	1.537
3.86	0.15856	0.7116	0.10316	4.353	1.537
3.87	0.1578	0.71127	0.10265	4.378	1.537
3.88	0.15705	0.71094	0.10214	4.403	1.538
3.89	0.15631	0.71062	0.10163	4.429	1.538
3.9	0.15557	0.71029	0.10113	4.454	1.538

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
3.91	0.15483	0.70997	0.10064	4.48	1.539
3.92	0.1541	0.70966	0.10014	4.506	1.539
3.93	0.15338	0.70934	0.099653	4.532	1.539
3.94	0.15266	0.70902	0.099167	4.558	1.539
3.95	0.15194	0.70871	0.098684	4.584	1.54
3.96	0.15123	0.7084	0.098204	4.61	1.54
3.97	0.15053	0.70809	0.097728	4.636	1.54
3.98	0.14983	0.70779	0.097255	4.663	1.541
3.99	0.14913	0.70748	0.096786	4.69	1.541
4	0.14844	0.70718	0.09632	4.716	1.541
4.01	0.14776	0.70688	0.095858	4.743	1.541
4.02	0.14707	0.70659	0.095398	4.77	1.542
4.03	0.1464	0.70629	0.094942	4.797	1.542
4.04	0.14572	0.706	0.09449	4.824	1.542
4.05	0.14506	0.7057	0.09404	4.852	1.542
4.06	0.14439	0.70541	0.093594	4.879	1.543
4.07	0.14373	0.70513	0.09315	4.907	1.543
4.08	0.14308	0.70484	0.09271	4.935	1.543
4.09	0.14243	0.70455	0.092273	4.962	1.544
4.1	0.14178	0.70427	0.091839	4.99	1.544
4.11	0.14114	0.70399	0.091408	5.018	1.544
4.12	0.1405	0.70371	0.09098	5.047	1.544
4.13	0.13987	0.70343	0.090554	5.075	1.545
4.14	0.13924	0.70316	0.090132	5.103	1.545
4.15	0.13861	0.70289	0.089713	5.132	1.545
4.16	0.13799	0.70261	0.089297	5.161	1.545
4.17	0.13738	0.70234	0.088883	5.19	1.546
4.18	0.13676	0.70208	0.088472	5.218	1.546
4.19	0.13615	0.70181	0.088064	5.248	1.546
4.2	0.13555	0.70154	0.087659	5.277	1.546
4.21	0.13495	0.70128	0.087257	5.306	1.547
4.22	0.13435	0.70102	0.086857	5.336	1.547
4.23	0.13376	0.70076	0.086461	5.365	1.547

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
4.24	0.13317	0.7005	0.086066	5.395	1.547
4.25	0.13258	0.70024	0.085675	5.425	1.548
4.26	0.132	0.69999	0.085286	5.455	1.548
4.27	0.13142	0.69974	0.0849	5.485	1.548
4.28	0.13085	0.69948	0.084516	5.515	1.548
4.29	0.13028	0.69923	0.084135	5.545	1.548
4.3	0.12971	0.69898	0.083756	5.576	1.549
4.31	0.12915	0.69874	0.08338	5.606	1.549
4.32	0.12858	0.69849	0.083006	5.637	1.549
4.33	0.12803	0.69825	0.082635	5.668	1.549
4.34	0.12748	0.698	0.082267	5.699	1.55
4.35	0.12693	0.69776	0.0819	5.73	1.55
4.36	0.12638	0.69752	0.081537	5.761	1.55
4.37	0.12584	0.69729	0.081175	5.793	1.55
4.38	0.1253	0.69705	0.080816	5.824	1.55
4.39	0.12476	0.69681	0.080459	5.856	1.551
4.4	0.12423	0.69658	0.080105	5.888	1.551
4.41	0.1237	0.69635	0.079753	5.919	1.551
4.42	0.12317	0.69612	0.079403	5.952	1.551
4.43	0.12265	0.69589	0.079056	5.984	1.551
4.44	0.12213	0.69566	0.078711	6.016	1.552
4.45	0.12162	0.69543	0.078368	6.048	1.552
4.46	0.1211	0.69521	0.078027	6.081	1.552
4.47	0.12059	0.69498	0.077688	6.114	1.552
4.48	0.12009	0.69476	0.077352	6.146	1.552
4.49	0.11958	0.69454	0.077018	6.179	1.553
4.5	0.11908	0.69432	0.076686	6.213	1.553
4.51	0.11859	0.6941	0.076356	6.246	1.553
4.52	0.11809	0.69388	0.076028	6.279	1.553
4.53	0.1176	0.69367	0.075702	6.313	1.553
4.54	0.11711	0.69345	0.075378	6.346	1.554
4.55	0.11663	0.69324	0.075057	6.38	1.554
4.56	0.11614	0.69303	0.074737	6.414	1.554

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
4.57	0.11567	0.69282	0.074419	6.448	1.554
4.58	0.11519	0.69261	0.074104	6.482	1.554
4.59	0.11472	0.6924	0.07379	6.516	1.555
4.6	0.11424	0.69219	0.073478	6.551	1.555
4.61	0.11378	0.69199	0.073169	6.585	1.555
4.62	0.11331	0.69178	0.072861	6.62	1.555
4.63	0.11285	0.69158	0.072555	6.655	1.555
4.64	0.11239	0.69138	0.072251	6.69	1.556
4.65	0.11193	0.69118	0.071949	6.725	1.556
4.66	0.11148	0.69098	0.071649	6.76	1.556
4.67	0.11103	0.69078	0.071351	6.796	1.556
4.68	0.11058	0.69058	0.071054	6.831	1.556
4.69	0.11013	0.69038	0.070759	6.867	1.556
4.7	0.10969	0.69019	0.070467	6.903	1.557
4.71	0.10925	0.68999	0.070176	6.939	1.557
4.72	0.10881	0.6898	0.069886	6.975	1.557
4.73	0.10837	0.68961	0.069599	7.011	1.557
4.74	0.10794	0.68942	0.069313	7.048	1.557
4.75	0.10751	0.68923	0.069029	7.084	1.557
4.76	0.10708	0.68904	0.068747	7.121	1.558
4.77	0.10666	0.68885	0.068466	7.158	1.558
4.78	0.10623	0.68867	0.068187	7.195	1.558
4.79	0.10581	0.68848	0.06791	7.232	1.558
4.8	0.1054	0.6883	0.067635	7.269	1.558
4.81	0.10498	0.68812	0.067361	7.306	1.558
4.82	0.10457	0.68793	0.067089	7.344	1.559
4.83	0.10416	0.68775	0.066818	7.382	1.559
4.84	0.10375	0.68757	0.066549	7.419	1.559
4.85	0.10334	0.68739	0.066282	7.457	1.559
4.86	0.10294	0.68722	0.066016	7.495	1.559
4.87	0.10254	0.68704	0.065752	7.534	1.559
4.88	0.10214	0.68686	0.065489	7.572	1.56
4.89	0.10174	0.68669	0.065228	7.611	1.56

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
4.9	0.10134	0.68651	0.064969	7.649	1.56
4.91	0.10095	0.68634	0.064711	7.688	1.56
4.92	0.10056	0.68617	0.064454	7.727	1.56
4.93	0.10017	0.686	0.064199	7.766	1.56
4.94	0.099788	0.68583	0.063946	7.806	1.561
4.95	0.099405	0.68566	0.063694	7.845	1.561
4.96	0.099023	0.68549	0.063444	7.884	1.561
4.97	0.098644	0.68532	0.063195	7.924	1.561
4.98	0.098267	0.68516	0.062947	7.964	1.561
4.99	0.097892	0.68499	0.062701	8.004	1.561
5	0.097519	0.68483	0.062456	8.044	1.561
5.02	0.09678	0.6845	0.061971	8.125	1.562
5.04	0.096048	0.68418	0.061491	8.206	1.562
5.06	0.095325	0.68386	0.061017	8.288	1.562
5.08	0.09461	0.68354	0.060549	8.371	1.563
5.1	0.093903	0.68323	0.060085	8.454	1.563
5.12	0.093203	0.68292	0.059627	8.538	1.563
5.14	0.092512	0.68262	0.059175	8.622	1.563
5.16	0.091827	0.68231	0.058727	8.707	1.564
5.18	0.091151	0.68201	0.058284	8.793	1.564
5.2	0.090481	0.68172	0.057846	8.879	1.564
5.22	0.089819	0.68143	0.057413	8.966	1.564
5.24	0.089164	0.68114	0.056985	9.053	1.565
5.26	0.088516	0.68085	0.056562	9.141	1.565
5.28	0.087874	0.68057	0.056143	9.23	1.565
5.3	0.08724	0.68029	0.055729	9.319	1.565
5.32	0.086613	0.68001	0.05532	9.409	1.566
5.34	0.085992	0.67974	0.054914	9.499	1.566
5.36	0.085377	0.67946	0.054514	9.591	1.566
5.38	0.084769	0.67919	0.054117	9.682	1.566
5.4	0.084168	0.67893	0.053725	9.775	1.567
5.42	0.083573	0.67867	0.053338	9.868	1.567
5.44	0.082984	0.6784	0.052954	9.962	1.567

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0^*}$	$\frac{\rho^*}{\rho}$
5.46	0.082401	0.67815	0.052574	10.06	1.567
5.48	0.081824	0.67789	0.052199	10.15	1.568
5.5	0.081253	0.67764	0.051827	10.25	1.568
5.52	0.080688	0.67739	0.051459	10.34	1.568
5.54	0.080128	0.67714	0.051096	10.44	1.568
5.56	0.079575	0.6769	0.050736	10.54	1.568
5.58	0.079027	0.67665	0.050379	10.64	1.569
5.6	0.078485	0.67641	0.050027	10.73	1.569
5.62	0.077948	0.67618	0.049678	10.83	1.569
5.64	0.077416	0.67594	0.049333	10.93	1.569
5.66	0.07689	0.67571	0.048991	11.04	1.569
5.68	0.076369	0.67548	0.048653	11.14	1.57
5.7	0.075854	0.67525	0.048319	11.24	1.57
5.72	0.075343	0.67502	0.047987	11.34	1.57
5.74	0.074838	0.6748	0.047659	11.45	1.57
5.76	0.074337	0.67458	0.047335	11.55	1.57
5.78	0.073842	0.67436	0.047014	11.66	1.571
5.8	0.073351	0.67414	0.046696	11.76	1.571
5.82	0.072866	0.67393	0.046381	11.87	1.571
5.84	0.072385	0.67371	0.046069	11.97	1.571
5.86	0.071908	0.6735	0.045761	12.08	1.571
5.88	0.071437	0.67329	0.045455	12.19	1.572
5.9	0.070969	0.67308	0.045153	12.3	1.572
5.92	0.070507	0.67288	0.044853	12.41	1.572
5.94	0.070049	0.67268	0.044557	12.52	1.572
5.96	0.069595	0.67248	0.044263	12.63	1.572
5.98	0.069145	0.67228	0.043972	12.74	1.572
6	0.0687	0.67208	0.043685	12.86	1.573
6.02	0.068259	0.67188	0.043399	12.97	1.573
6.04	0.067823	0.67169	0.043117	13.08	1.573
6.06	0.06739	0.6715	0.042838	13.2	1.573
6.08	0.066962	0.67131	0.042561	13.31	1.573
6.1	0.066537	0.67112	0.042287	13.43	1.573

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
6.12	0.066117	0.67093	0.042015	13.55	1.574
6.14	0.0657	0.67075	0.041746	13.66	1.574
6.16	0.065287	0.67056	0.041479	13.78	1.574
6.18	0.064878	0.67038	0.041216	13.9	1.574
6.2	0.064473	0.6702	0.040954	14.02	1.574
6.22	0.064072	0.67003	0.040695	14.14	1.574
6.24	0.063674	0.66985	0.040439	14.26	1.575
6.26	0.06328	0.66967	0.040185	14.38	1.575
6.28	0.06289	0.6695	0.039933	14.51	1.575
6.3	0.062503	0.66933	0.039684	14.63	1.575
6.32	0.06212	0.66916	0.039436	14.76	1.575
6.34	0.06174	0.66899	0.039192	14.88	1.575
6.36	0.061364	0.66882	0.038949	15.01	1.575
6.38	0.060991	0.66866	0.038709	15.13	1.576
6.4	0.060621	0.66849	0.038471	15.26	1.576
6.42	0.060255	0.66833	0.038235	15.39	1.576
6.44	0.059892	0.66817	0.038001	15.52	1.576
6.46	0.059532	0.66801	0.03777	15.65	1.576
6.48	0.059175	0.66785	0.03754	15.78	1.576
6.5	0.058822	0.66769	0.037313	15.91	1.576
6.52	0.058472	0.66754	0.037087	16.04	1.577
6.54	0.058124	0.66738	0.036864	16.17	1.577
6.56	0.05778	0.66723	0.036643	16.3	1.577
6.58	0.057439	0.66708	0.036423	16.44	1.577
6.6	0.057101	0.66693	0.036206	16.57	1.577
6.62	0.056766	0.66678	0.03599	16.71	1.577
6.64	0.056433	0.66663	0.035777	16.85	1.577
6.66	0.056104	0.66649	0.035565	16.98	1.578
6.68	0.055777	0.66634	0.035355	17.12	1.578
6.7	0.055454	0.6662	0.035147	17.26	1.578
6.72	0.055133	0.66606	0.034941	17.4	1.578
6.74	0.054814	0.66591	0.034737	17.54	1.578
6.76	0.054499	0.66577	0.034534	17.68	1.578

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
6.78	0.054186	0.66563	0.034333	17.82	1.578
6.8	0.053876	0.6655	0.034134	17.96	1.578
6.82	0.053569	0.66536	0.033937	18.11	1.578
6.84	0.053264	0.66522	0.033741	18.25	1.579
6.86	0.052961	0.66509	0.033547	18.4	1.579
6.88	0.052662	0.66496	0.033355	18.54	1.579
6.9	0.052364	0.66482	0.033164	18.69	1.579
6.92	0.052069	0.66469	0.032975	18.84	1.579
6.94	0.051777	0.66456	0.032788	18.99	1.579
6.96	0.051487	0.66443	0.032602	19.14	1.579
6.98	0.0512	0.66431	0.032417	19.29	1.579
7	0.050915	0.66418	0.032235	19.44	1.58
7.02	0.050632	0.66405	0.032053	19.59	1.58
7.04	0.050352	0.66393	0.031874	19.74	1.58
7.06	0.050073	0.66381	0.031696	19.89	1.58
7.08	0.049798	0.66368	0.031519	20.05	1.58
7.1	0.049524	0.66356	0.031344	20.2	1.58
7.12	0.049253	0.66344	0.03117	20.36	1.58
7.14	0.048984	0.66332	0.030998	20.51	1.58
7.16	0.048717	0.6632	0.030827	20.67	1.58
7.18	0.048452	0.66308	0.030657	20.83	1.58
7.2	0.048189	0.66297	0.030489	20.99	1.581
7.22	0.047929	0.66285	0.030322	21.15	1.581
7.24	0.04767	0.66274	0.030157	21.31	1.581
7.26	0.047414	0.66262	0.029993	21.47	1.581
7.28	0.047159	0.66251	0.02983	21.63	1.581
7.3	0.046907	0.6624	0.029669	21.8	1.581
7.32	0.046657	0.66228	0.029508	21.96	1.581
7.34	0.046408	0.66217	0.02935	22.13	1.581
7.36	0.046162	0.66206	0.029192	22.29	1.581
7.38	0.045918	0.66196	0.029036	22.46	1.581
7.4	0.045675	0.66185	0.028881	22.63	1.582
7.42	0.045435	0.66174	0.028727	22.8	1.582

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
7.44	0.045196	0.66163	0.028574	22.97	1.582
7.46	0.044959	0.66153	0.028423	23.14	1.582
7.48	0.044724	0.66142	0.028273	23.31	1.582
7.5	0.044491	0.66132	0.028124	23.48	1.582
7.52	0.044259	0.66122	0.027976	23.65	1.582
7.54	0.04403	0.66112	0.027829	23.83	1.582
7.56	0.043802	0.66101	0.027684	24	1.582
7.58	0.043576	0.66091	0.027539	24.18	1.582
7.6	0.043351	0.66081	0.027396	24.35	1.582
7.62	0.043129	0.66071	0.027254	24.53	1.582
7.64	0.042908	0.66062	0.027113	24.71	1.583
7.66	0.042689	0.66052	0.026973	24.89	1.583
7.68	0.042471	0.66042	0.026834	25.07	1.583
7.7	0.042255	0.66032	0.026696	25.25	1.583
7.72	0.042041	0.66023	0.026559	25.43	1.583
7.74	0.041828	0.66013	0.026424	25.61	1.583
7.76	0.041617	0.66004	0.026289	25.8	1.583
7.78	0.041408	0.65995	0.026155	25.98	1.583
7.8	0.0412	0.65985	0.026023	26.17	1.583
7.82	0.040993	0.65976	0.025891	26.35	1.583
7.84	0.040788	0.65967	0.02576	26.54	1.583
7.86	0.040585	0.65958	0.025631	26.73	1.583
7.88	0.040383	0.65949	0.025502	26.92	1.584
7.9	0.040183	0.6594	0.025374	27.11	1.584
7.92	0.039984	0.65931	0.025247	27.3	1.584
7.94	0.039787	0.65922	0.025122	27.49	1.584
7.96	0.039591	0.65914	0.024997	27.68	1.584
7.98	0.039396	0.65905	0.024873	27.88	1.584
8	0.039203	0.65896	0.02475	28.07	1.584
8.02	0.039011	0.65888	0.024628	28.27	1.584
8.04	0.038821	0.65879	0.024506	28.46	1.584
8.06	0.038632	0.65871	0.024386	28.66	1.584
8.08	0.038445	0.65863	0.024266	28.86	1.584

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
8.1	0.038259	0.65854	0.024148	29.06	1.584
8.12	0.038074	0.65846	0.02403	29.26	1.584
8.14	0.03789	0.65838	0.023913	29.46	1.584
8.16	0.037708	0.6583	0.023797	29.66	1.585
8.18	0.037527	0.65822	0.023682	29.87	1.585
8.2	0.037347	0.65814	0.023568	30.07	1.585
8.22	0.037169	0.65806	0.023454	30.28	1.585
8.24	0.036992	0.65798	0.023341	30.48	1.585
8.26	0.036816	0.6579	0.023229	30.69	1.585
8.28	0.036642	0.65782	0.023118	30.9	1.585
8.3	0.036468	0.65775	0.023008	31.11	1.585
8.32	0.036296	0.65767	0.022899	31.32	1.585
8.34	0.036125	0.65759	0.02279	31.53	1.585
8.36	0.035956	0.65752	0.022682	31.74	1.585
8.38	0.035787	0.65744	0.022575	31.95	1.585
8.4	0.03562	0.65737	0.022468	32.17	1.585
8.42	0.035454	0.65729	0.022362	32.38	1.585
8.44	0.035289	0.65722	0.022257	32.6	1.585
8.46	0.035125	0.65715	0.022153	32.81	1.586
8.48	0.034962	0.65707	0.02205	33.03	1.586
8.5	0.0348	0.657	0.021947	33.25	1.586
8.52	0.03464	0.65693	0.021845	33.47	1.586
8.54	0.03448	0.65686	0.021743	33.69	1.586
8.56	0.034322	0.65679	0.021643	33.91	1.586
8.58	0.034165	0.65672	0.021543	34.14	1.586
8.6	0.034009	0.65665	0.021444	34.36	1.586
8.62	0.033853	0.65658	0.021345	34.59	1.586
8.64	0.033699	0.65651	0.021247	34.81	1.586
8.66	0.033546	0.65644	0.02115	35.04	1.586
8.68	0.033394	0.65637	0.021053	35.27	1.586
8.7	0.033243	0.65631	0.020957	35.5	1.586
8.72	0.033094	0.65624	0.020862	35.73	1.586
8.74	0.032945	0.65617	0.020767	35.96	1.586

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
8.76	0.032797	0.65611	0.020673	36.19	1.586
8.78	0.03265	0.65604	0.02058	36.42	1.586
8.8	0.032504	0.65598	0.020487	36.66	1.587
8.82	0.032359	0.65591	0.020395	36.89	1.587
8.84	0.032215	0.65585	0.020304	37.13	1.587
8.86	0.032072	0.65578	0.020213	37.36	1.587
8.88	0.03193	0.65572	0.020123	37.6	1.587
8.9	0.031788	0.65566	0.020033	37.84	1.587
8.92	0.031648	0.6556	0.019944	38.08	1.587
8.94	0.031509	0.65553	0.019855	38.32	1.587
8.96	0.03137	0.65547	0.019767	38.56	1.587
8.98	0.031233	0.65541	0.01968	38.81	1.587
9	0.031096	0.65535	0.019593	39.05	1.587
9.02	0.03096	0.65529	0.019507	39.3	1.587
9.04	0.030826	0.65523	0.019422	39.54	1.587
9.06	0.030692	0.65517	0.019337	39.79	1.587
9.08	0.030559	0.65511	0.019252	40.04	1.587
9.1	0.030426	0.65505	0.019168	40.29	1.587
9.12	0.030295	0.65499	0.019085	40.54	1.587
9.14	0.030164	0.65493	0.019002	40.79	1.587
9.16	0.030035	0.65488	0.01892	41.05	1.587
9.18	0.029906	0.65482	0.018838	41.3	1.588
9.2	0.029778	0.65476	0.018757	41.55	1.588
9.22	0.02965	0.6547	0.018676	41.81	1.588
9.24	0.029524	0.65465	0.018596	42.07	1.588
9.26	0.029398	0.65459	0.018516	42.33	1.588
9.28	0.029274	0.65454	0.018437	42.59	1.588
9.3	0.029149	0.65448	0.018358	42.85	1.588
9.32	0.029026	0.65443	0.01828	43.11	1.588
9.34	0.028904	0.65437	0.018202	43.37	1.588
9.36	0.028782	0.65432	0.018125	43.63	1.588
9.38	0.028661	0.65426	0.018049	43.9	1.588
9.4	0.028541	0.65421	0.017972	44.16	1.588

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
9.42	0.028421	0.65416	0.017897	44.43	1.588
9.44	0.028303	0.6541	0.017821	44.7	1.588
9.46	0.028185	0.65405	0.017747	44.97	1.588
9.48	0.028068	0.654	0.017672	45.24	1.588
9.5	0.027951	0.65395	0.017598	45.51	1.588
9.52	0.027835	0.65389	0.017525	45.78	1.588
9.54	0.02772	0.65384	0.017452	46.06	1.588
9.56	0.027606	0.65379	0.01738	46.33	1.588
9.58	0.027492	0.65374	0.017308	46.61	1.588
9.6	0.027379	0.65369	0.017236	46.88	1.588
9.62	0.027267	0.65364	0.017165	47.16	1.589
9.64	0.027155	0.65359	0.017094	47.44	1.589
9.66	0.027045	0.65354	0.017024	47.72	1.589
9.68	0.026934	0.65349	0.016954	48	1.589
9.7	0.026825	0.65344	0.016885	48.29	1.589
9.72	0.026716	0.65339	0.016816	48.57	1.589
9.74	0.026608	0.65335	0.016747	48.86	1.589
9.76	0.0265	0.6533	0.016679	49.14	1.589
9.78	0.026393	0.65325	0.016611	49.43	1.589
9.8	0.026287	0.6532	0.016544	49.72	1.589
9.82	0.026181	0.65315	0.016477	50.01	1.589
9.84	0.026076	0.65311	0.016411	50.3	1.589
9.86	0.025972	0.65306	0.016345	50.59	1.589
9.88	0.025868	0.65301	0.016279	50.88	1.589
9.9	0.025765	0.65297	0.016214	51.18	1.589
9.92	0.025662	0.65292	0.016149	51.47	1.589
9.94	0.02556	0.65288	0.016084	51.77	1.589
9.96	0.025459	0.65283	0.01602	52.06	1.589
9.98	0.025358	0.65279	0.015956	52.36	1.589
1	0.025258	0.65274	0.015893	52.66	1.589
10.1	0.024766	0.65252	0.015582	54.18	1.589
10.2	0.024289	0.65231	0.015279	55.73	1.59
10.3	0.023825	0.6521	0.014986	57.3	1.59

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
10.4	0.023374	0.6519	0.0147	58.91	1.59
10.5	0.022935	0.6517	0.014423	60.54	1.59
10.6	0.022509	0.65151	0.014154	62.21	1.59
10.7	0.022095	0.65133	0.013892	63.91	1.59
10.8	0.021692	0.65115	0.013637	65.64	1.591
10.9	0.0213	0.65097	0.013389	67.4	1.591
11	0.020918	0.6508	0.013148	69.19	1.591
11.1	0.020546	0.65064	0.012913	71.02	1.591
11.2	0.020184	0.65047	0.012685	72.87	1.591
11.3	0.019832	0.65032	0.012463	74.76	1.591
11.4	0.019489	0.65016	0.012246	76.69	1.591
11.5	0.019154	0.65001	0.012035	78.64	1.592
11.6	0.018829	0.64987	0.011829	80.63	1.592
11.7	0.018511	0.64973	0.011629	82.65	1.592
11.8	0.018201	0.64959	0.011433	84.71	1.592
11.9	0.017899	0.64945	0.011243	86.8	1.592
12	0.017604	0.64932	0.011057	88.93	1.592
12.1	0.017317	0.64919	0.010876	91.09	1.592
12.2	0.017037	0.64907	0.010699	93.28	1.592
12.3	0.016763	0.64894	0.010526	95.51	1.592
12.4	0.016496	0.64883	0.010358	97.78	1.593
12.5	0.016235	0.64871	0.010193	$1.0E{+}2$	1.593
12.6	0.01598	0.64859	0.010033	$1.0E{+}2$	1.593
12.7	0.015731	0.64848	0.00988	$1.0E{+}2$	1.593
12.8	0.015488	0.64837	0.00972	$1.1E{+}2$	1.593
12.9	0.015251	0.64827	0.00957	$1.1E{+}2$	1.593
13	0.015019	0.64816	0.00943	$1.1E{+}2$	1.593
13.1	0.014792	0.64806	0.00928	$1.1E{+}2$	1.593
13.2	0.01457	0.64796	0.00914	$1.2E{+}2$	1.593
13.3	0.014353	0.64787	0.00901	$1.2E{+}2$	1.593
13.4	0.014141	0.64777	0.00887	$1.2E{+}2$	1.593
13.5	0.013934	0.64768	0.00874	$1.3E{+}2$	1.594
13.6	0.013731	0.64759	0.00862	$1.3E{+}2$	1.594

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
13.7	0.013533	0.6475	0.00849	1.3E+2	1.594
13.8	0.013338	0.64741	0.00837	1.3E+2	1.594
13.9	0.013148	0.64733	0.00825	1.4E+2	1.594
14	0.012962	0.64724	0.00813	1.4E+2	1.594
14.1	0.01278	0.64716	0.00802	1.4E+2	1.594
14.2	0.012602	0.64708	0.00791	1.5E+2	1.594
14.3	0.012427	0.647	0.0078	1.5E+2	1.594
14.4	0.012256	0.64693	0.00769	1.5E+2	1.594
14.5	0.012089	0.64685	0.00758	1.5E+2	1.594
14.6	0.011925	0.64678	0.00748	1.6E+2	1.594
14.7	0.011764	0.64671	0.00738	1.6E+2	1.594
14.8	0.011606	0.64664	0.00728	1.6E+2	1.594
14.9	0.011452	0.64657	0.00718	1.7E+2	1.595
15	0.011301	0.6465	0.00709	1.7E+2	1.595
15.1	0.011152	0.64643	0.00699	1.7E+2	1.595
15.2	0.011007	0.64637	0.0069	1.8E+2	1.595
15.3	0.010864	0.6463	0.00681	1.8E+2	1.595
15.4	0.010724	0.64624	0.00672	1.8E+2	1.595
15.5	0.010587	0.64618	0.00664	1.9E+2	1.595
15.6	0.010452	0.64612	0.00655	1.9E+2	1.595
15.7	0.01032	0.64606	0.00647	1.9E+2	1.595
15.8	0.01019	0.646	0.00639	2.0E+2	1.595
15.9	0.010063	0.64595	0.00631	2.0E+2	1.595
16	0.00994	0.64589	0.00623	2.1E+2	1.595
16.1	0.00982	0.64584	0.00615	2.1E+2	1.595
16.2	0.0097	0.64578	0.00608	2.1E+2	1.595
16.3	0.00958	0.64573	0.006	2.2E+2	1.595
16.4	0.00946	0.64568	0.00593	2.2E+2	1.595
16.5	0.00935	0.64563	0.00586	2.3E+2	1.595
16.6	0.00924	0.64558	0.00579	2.3E+2	1.595
16.7	0.00913	0.64553	0.00572	2.3E+2	1.595
16.8	0.00902	0.64548	0.00565	2.4E+2	1.595
16.9	0.00891	0.64543	0.00559	2.4E+2	1.595

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^{*}}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^{*}}$	$\frac{\mathbf{P}}{\mathbf{P}^{*}}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^{*}}$	$\frac{\rho^{*}}{\rho}$
17	0.00881	0.64538	0.00552	$2.5E+2$	1.595
17.1	0.00871	0.64534	0.00546	$2.5E+2$	1.596
17.2	0.00861	0.64529	0.00539	$2.5E+2$	1.596
17.3	0.00851	0.64525	0.00533	$2.6E+2$	1.596
17.4	0.00841	0.64521	0.00527	$2.6E+2$	1.596
17.5	0.00831	0.64516	0.00521	$2.7E+2$	1.596
17.6	0.00822	0.64512	0.00515	$2.7E+2$	1.596
17.7	0.00813	0.64508	0.00509	$2.8E+2$	1.596
17.8	0.00804	0.64504	0.00504	$2.8E+2$	1.596
17.9	0.00795	0.645	0.00498	$2.9E+2$	1.596
18	0.00786	0.64496	0.00493	$2.9E+2$	1.596
18.1	0.00777	0.64492	0.00487	$3.0E+2$	1.596
18.2	0.00769	0.64488	0.00482	$3.0E+2$	1.596
18.3	0.00761	0.64485	0.00477	$3.1E+2$	1.596
18.4	0.00752	0.64481	0.00471	$3.1E+2$	1.596
18.5	0.00744	0.64477	0.00466	$3.2E+2$	1.596
18.6	0.00736	0.64474	0.00461	$3.2E+2$	1.596
18.7	0.00728	0.6447	0.00456	$3.3E+2$	1.596
18.8	0.00721	0.64467	0.00452	$3.3E+2$	1.596
18.9	0.00713	0.64463	0.00447	$3.4E+2$	1.596
19	0.00706	0.6446	0.00442	$3.4E+2$	1.596
19.1	0.00698	0.64457	0.00438	$3.5E+2$	1.596
19.2	0.00691	0.64453	0.00433	$3.5E+2$	1.596
19.3	0.00684	0.6445	0.00429	$3.6E+2$	1.596
19.4	0.00677	0.64447	0.00424	$3.6E+2$	1.596
19.5	0.0067	0.64444	0.0042	$3.7E+2$	1.596
19.6	0.00663	0.64441	0.00416	$3.7E+2$	1.596
19.7	0.00657	0.64438	0.00411	$3.8E+2$	1.596
19.8	0.0065	0.64435	0.00407	$3.8E+2$	1.596
19.9	0.00644	0.64432	0.00403	$3.9E+2$	1.596
2	0.00637	0.64429	0.00399	$4.0E+2$	1.596
20.1	0.00631	0.64426	0.00395	$4.0E+2$	1.596
20.2	0.00625	0.64424	0.00391	$4.1E+2$	1.596

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
20.3	0.00618	0.64421	0.00387	4.1E+2	1.596
20.4	0.00612	0.64418	0.00384	4.2E+2	1.597
20.5	0.00607	0.64415	0.0038	4.3E+2	1.597
20.6	0.00601	0.64413	0.00376	4.3E+2	1.597
20.7	0.00595	0.6441	0.00373	4.4E+2	1.597
20.8	0.00589	0.64408	0.00369	4.5E+2	1.597
20.9	0.00584	0.64405	0.00366	4.5E+2	1.597
21	0.00578	0.64403	0.00362	4.6E+2	1.597
21.1	0.00573	0.644	0.00359	4.6E+2	1.597
21.2	0.00567	0.64398	0.00355	4.7E+2	1.597
21.3	0.00562	0.64396	0.00352	4.8E+2	1.597
21.4	0.00557	0.64393	0.00349	4.8E+2	1.597
21.5	0.00552	0.64391	0.00345	4.9E+2	1.597
21.6	0.00546	0.64389	0.00342	5.0E+2	1.597
21.7	0.00541	0.64386	0.00339	5.0E+2	1.597
21.8	0.00537	0.64384	0.00336	5.1E+2	1.597
21.9	0.00532	0.64382	0.00333	5.2E+2	1.597
22	0.00527	0.6438	0.0033	5.3E+2	1.597
22.1	0.00522	0.64378	0.00327	5.3E+2	1.597
22.2	0.00517	0.64376	0.00324	5.4E+2	1.597
22.3	0.00513	0.64373	0.00321	5.5E+2	1.597
22.4	0.00508	0.64371	0.00318	5.5E+2	1.597
22.5	0.00504	0.64369	0.00315	5.6E+2	1.597
22.6	0.00499	0.64367	0.00313	5.7E+2	1.597
22.7	0.00495	0.64365	0.0031	5.8E+2	1.597
22.8	0.00491	0.64364	0.00307	5.8E+2	1.597
22.9	0.00486	0.64362	0.00305	5.9E+2	1.597
23	0.00482	0.6436	0.00302	6.0E+2	1.597
23.1	0.00478	0.64358	0.00299	6.1E+2	1.597
23.2	0.00474	0.64356	0.00297	6.1E+2	1.597
23.3	0.0047	0.64354	0.00294	6.2E+2	1.597
23.4	0.00466	0.64352	0.00292	6.3E+2	1.597
23.5	0.00462	0.64351	0.00289	6.4E+2	1.597

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
23.6	0.00458	0.64349	0.00287	$6.5E+2$	1.597
23.7	0.00454	0.64347	0.00284	$6.5E+2$	1.597
23.8	0.0045	0.64345	0.00282	$6.6E+2$	1.597
23.9	0.00447	0.64344	0.0028	$6.7E+2$	1.597
24	0.00443	0.64342	0.00277	$6.8E+2$	1.597
24.1	0.00439	0.6434	0.00275	$6.9E+2$	1.597
24.2	0.00436	0.64339	0.00273	$7.0E+2$	1.597
24.3	0.00432	0.64337	0.0027	$7.1E+2$	1.597
24.4	0.00428	0.64336	0.00268	$7.1E+2$	1.597
24.5	0.00425	0.64334	0.00266	$7.2E+2$	1.597
24.6	0.00422	0.64333	0.00264	$7.3E+2$	1.597
24.7	0.00418	0.64331	0.00262	$7.4E+2$	1.597
24.8	0.00415	0.6433	0.0026	$7.5E+2$	1.597
24.9	0.00411	0.64328	0.00258	$7.6E+2$	1.597
25	0.00408	0.64327	0.00256	$7.7E+2$	1.597
25.1	0.00405	0.64325	0.00254	$7.8E+2$	1.597
25.2	0.00402	0.64324	0.00252	$7.9E+2$	1.597
25.3	0.00399	0.64322	0.0025	$7.9E+2$	1.597
25.4	0.00395	0.64321	0.00248	$8.0E+2$	1.597
25.5	0.00392	0.6432	0.00246	$8.1E+2$	1.597
25.6	0.00389	0.64318	0.00244	$8.2E+2$	1.597
25.7	0.00386	0.64317	0.00242	$8.3E+2$	1.597
25.8	0.00383	0.64315	0.0024	$8.4E+2$	1.597
25.9	0.0038	0.64314	0.00238	$8.5E+2$	1.597
26	0.00377	0.64313	0.00236	$8.6E+2$	1.597
26.1	0.00375	0.64312	0.00234	$8.7E+2$	1.597
26.2	0.00372	0.6431	0.00233	$8.8E+2$	1.597
26.3	0.00369	0.64309	0.00231	$8.9E+2$	1.597
26.4	0.00366	0.64308	0.00229	$9.0E+2$	1.597
26.5	0.00363	0.64307	0.00227	$9.1E+2$	1.597
26.6	0.00361	0.64305	0.00226	$9.2E+2$	1.597
26.7	0.00358	0.64304	0.00224	$9.3E+2$	1.597
26.8	0.00355	0.64303	0.00222	$9.4E+2$	1.597

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{{T_0}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{{P_0}^*}$	$\frac{\rho^*}{\rho}$
26.9	0.00353	0.64302	0.00221	9.5E+2	1.597
27	0.0035	0.64301	0.00219	9.6E+2	1.597
27.1	0.00347	0.64299	0.00218	9.7E+2	1.597
27.2	0.00345	0.64298	0.00216	9.9E+2	1.598
27.3	0.00342	0.64297	0.00214	1.0E+3	1.598
27.4	0.0034	0.64296	0.00213	1.0E+3	1.598
27.5	0.00337	0.64295	0.00211	1.0E+3	1.598
27.6	0.00335	0.64294	0.0021	1.0E+3	1.598
27.7	0.00333	0.64293	0.00208	1.0E+3	1.598
27.8	0.0033	0.64292	0.00207	1.1E+3	1.598
27.9	0.00328	0.64291	0.00205	1.1E+3	1.598
28	0.00326	0.6429	0.00204	1.1E+3	1.598
28.1	0.00323	0.64289	0.00202	1.1E+3	1.598
28.2	0.00321	0.64287	0.00201	1.1E+3	1.598
28.3	0.00319	0.64286	0.00199	1.1E+3	1.598
28.4	0.00316	0.64285	0.00198	1.1E+3	1.598
28.5	0.00314	0.64284	0.00197	1.1E+3	1.598
28.6	0.00312	0.64284	0.00195	1.1E+3	1.598
28.7	0.0031	0.64283	0.00194	1.2E+3	1.598
28.8	0.00308	0.64282	0.00193	1.2E+3	1.598
28.9	0.00306	0.64281	0.00191	1.2E+3	1.598
29	0.00304	0.6428	0.0019	1.2E+3	1.598
29.1	0.00301	0.64279	0.00189	1.2E+3	1.598
29.2	0.00299	0.64278	0.00187	1.2E+3	1.598
29.3	0.00297	0.64277	0.00186	1.2E+3	1.598
29.4	0.00295	0.64276	0.00185	1.2E+3	1.598
29.5	0.00293	0.64275	0.00184	1.3E+3	1.598
29.6	0.00291	0.64274	0.00182	1.3E+3	1.598
29.7	0.00289	0.64273	0.00181	1.3E+3	1.598
29.8	0.00287	0.64272	0.0018	1.3E+3	1.598
29.9	0.00286	0.64272	0.00179	1.3E+3	1.598
3	0.00284	0.64271	0.00178	1.3E+3	1.598
30.1	0.00282	0.6427	0.00176	1.3E+3	1.598

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
30.2	0.0028	0.64269	0.00175	1.3E+3	1.598
30.3	0.00278	0.64268	0.00174	1.4E+3	1.598
30.4	0.00276	0.64267	0.00173	1.4E+3	1.598
30.5	0.00274	0.64267	0.00172	1.4E+3	1.598
30.6	0.00273	0.64266	0.00171	1.4E+3	1.598
30.7	0.00271	0.64265	0.0017	1.4E+3	1.598
30.8	0.00269	0.64264	0.00168	1.4E+3	1.598
30.9	0.00267	0.64263	0.00167	1.4E+3	1.598
31	0.00266	0.64263	0.00166	1.5E+3	1.598
31.1	0.00264	0.64262	0.00165	1.5E+3	1.598
31.2	0.00262	0.64261	0.00164	1.5E+3	1.598
31.3	0.00261	0.6426	0.00163	1.5E+3	1.598
31.4	0.00259	0.6426	0.00162	1.5E+3	1.598
31.5	0.00257	0.64259	0.00161	1.5E+3	1.598
31.6	0.00256	0.64258	0.0016	1.5E+3	1.598
31.7	0.00254	0.64258	0.00159	1.6E+3	1.598
31.8	0.00252	0.64257	0.00158	1.6E+3	1.598
31.9	0.00251	0.64256	0.00157	1.6E+3	1.598
32	0.00249	0.64255	0.00156	1.6E+3	1.598
32.1	0.00248	0.64255	0.00155	1.6E+3	1.598
32.2	0.00246	0.64254	0.00154	1.6E+3	1.598
32.3	0.00245	0.64253	0.00153	1.6E+3	1.598
32.4	0.00243	0.64253	0.00152	1.7E+3	1.598
32.5	0.00242	0.64252	0.00151	1.7E+3	1.598
32.6	0.0024	0.64251	0.0015	1.7E+3	1.598
32.7	0.00239	0.64251	0.00149	1.7E+3	1.598
32.8	0.00237	0.6425	0.00149	1.7E+3	1.598
32.9	0.00236	0.64249	0.00148	1.7E+3	1.598
33	0.00234	0.64249	0.00147	1.7E+3	1.598
33.1	0.00233	0.64248	0.00146	1.8E+3	1.598
33.2	0.00232	0.64247	0.00145	1.8E+3	1.598
33.3	0.0023	0.64247	0.00144	1.8E+3	1.598
33.4	0.00229	0.64246	0.00143	1.8E+3	1.598

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
33.5	0.00228	0.64246	0.00142	1.8E+3	1.598
33.6	0.00226	0.64245	0.00142	1.8E+3	1.598
33.7	0.00225	0.64244	0.00141	1.9E+3	1.598
33.8	0.00224	0.64244	0.0014	1.9E+3	1.598
33.9	0.00222	0.64243	0.00139	1.9E+3	1.598
34	0.00221	0.64243	0.00138	1.9E+3	1.598
34.1	0.0022	0.64242	0.00137	1.9E+3	1.598
34.2	0.00218	0.64241	0.00137	1.9E+3	1.598
34.3	0.00217	0.64241	0.00136	2.0E+3	1.598
34.4	0.00216	0.6424	0.00135	2.0E+3	1.598
34.5	0.00215	0.6424	0.00134	2.0E+3	1.598
34.6	0.00213	0.64239	0.00133	2.0E+3	1.598
34.7	0.00212	0.64239	0.00133	2.0E+3	1.598
34.8	0.00211	0.64238	0.00132	2.0E+3	1.598
34.9	0.0021	0.64238	0.00131	2.1E+3	1.598
35	0.00208	0.64237	0.0013	2.1E+3	1.598
35.1	0.00207	0.64237	0.0013	2.1E+3	1.598
35.2	0.00206	0.64236	0.00129	2.1E+3	1.598
35.3	0.00205	0.64235	0.00128	2.1E+3	1.598
35.4	0.00204	0.64235	0.00128	2.2E+3	1.598
35.5	0.00203	0.64234	0.00127	2.2E+3	1.598
35.6	0.00202	0.64234	0.00126	2.2E+3	1.598
35.7	0.002	0.64233	0.00125	2.2E+3	1.598
35.8	0.00199	0.64233	0.00125	2.2E+3	1.598
35.9	0.00198	0.64232	0.00124	2.2E+3	1.598
36	0.00197	0.64232	0.00123	2.3E+3	1.598
36.1	0.00196	0.64231	0.00123	2.3E+3	1.598
36.2	0.00195	0.64231	0.00122	2.3E+3	1.598
36.3	0.00194	0.6423	0.00121	2.3E+3	1.598
36.4	0.00193	0.6423	0.00121	2.3E+3	1.598
36.5	0.00192	0.6423	0.0012	2.4E+3	1.598
36.6	0.00191	0.64229	0.00119	2.4E+3	1.598
36.7	0.0019	0.64229	0.00119	2.4E+3	1.598

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
36.8	0.00189	0.64228	0.00118	2.4E+3	1.598
36.9	0.00188	0.64228	0.00117	2.4E+3	1.598
37	0.00187	0.64227	0.00117	2.5E+3	1.598
37.1	0.00186	0.64227	0.00116	2.5E+3	1.598
37.2	0.00185	0.64226	0.00115	2.5E+3	1.598
37.3	0.00184	0.64226	0.00115	2.5E+3	1.598
37.4	0.00183	0.64225	0.00114	2.5E+3	1.598
37.5	0.00182	0.64225	0.00114	2.6E+3	1.598
37.6	0.00181	0.64225	0.00113	2.6E+3	1.598
37.7	0.0018	0.64224	0.00112	2.6E+3	1.598
37.8	0.00179	0.64224	0.00112	2.6E+3	1.598
37.9	0.00178	0.64223	0.00111	2.6E+3	1.598
38	0.00177	0.64223	0.00111	2.7E+3	1.598
38.1	0.00176	0.64222	0.0011	2.7E+3	1.598
38.2	0.00175	0.64222	0.0011	2.7E+3	1.598
38.3	0.00174	0.64222	0.00109	2.7E+3	1.598
38.4	0.00173	0.64221	0.00108	2.7E+3	1.598
38.5	0.00172	0.64221	0.00108	2.8E+3	1.598
38.6	0.00171	0.6422	0.00107	2.8E+3	1.598
38.7	0.00171	0.6422	0.00107	2.8E+3	1.598
38.8	0.0017	0.6422	0.00106	2.8E+3	1.598
38.9	0.00169	0.64219	0.00106	2.9E+3	1.598
39	0.00168	0.64219	0.00105	2.9E+3	1.598
39.1	0.00167	0.64218	0.00105	2.9E+3	1.598
39.2	0.00166	0.64218	0.00104	2.9E+3	1.598
39.3	0.00165	0.64218	0.00103	2.9E+3	1.598
39.4	0.00165	0.64217	0.00103	3.0E+3	1.598
39.5	0.00164	0.64217	0.00102	3.0E+3	1.598
39.6	0.00163	0.64217	0.00102	3.0E+3	1.598
39.7	0.00162	0.64216	0.00101	3.0E+3	1.598
39.8	0.00161	0.64216	0.00101	3.1E+3	1.598
39.9	0.0016	0.64216	0.001	3.1E+3	1.598
4	0.0016	0.64215	0.000999	3.1E+3	1.598

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
40.1	0.00159	0.64215	0.000994	$3.1E{+}3$	1.598
40.2	0.00158	0.64214	0.000989	$3.1E{+}3$	1.598
40.3	0.00157	0.64214	0.000984	$3.2E{+}3$	1.598
40.4	0.00156	0.64214	0.000979	$3.2E{+}3$	1.598
40.5	0.00156	0.64213	0.000974	$3.2E{+}3$	1.598
40.6	0.00155	0.64213	0.00097	$3.2E{+}3$	1.598
40.7	0.00154	0.64213	0.000965	$3.3E{+}3$	1.598
40.8	0.00153	0.64212	0.00096	$3.3E{+}3$	1.598
40.9	0.00153	0.64212	0.000955	$3.3E{+}3$	1.598
41	0.00152	0.64212	0.000951	$3.3E{+}3$	1.598
41.1	0.00151	0.64211	0.000946	$3.4E{+}3$	1.598
41.2	0.0015	0.64211	0.000942	$3.4E{+}3$	1.598
41.3	0.0015	0.64211	0.000937	$3.4E{+}3$	1.598
41.4	0.00149	0.6421	0.000932	$3.4E{+}3$	1.598
41.5	0.00148	0.6421	0.000928	$3.5E{+}3$	1.598
41.6	0.00148	0.6421	0.000924	$3.5E{+}3$	1.598
41.7	0.00147	0.64209	0.000919	$3.5E{+}3$	1.598
41.8	0.00146	0.64209	0.000915	$3.5E{+}3$	1.598
41.9	0.00146	0.64209	0.00091	$3.6E{+}3$	1.598
42	0.00145	0.64209	0.000906	$3.6E{+}3$	1.598
42.1	0.00144	0.64208	0.000902	$3.6E{+}3$	1.598
42.2	0.00143	0.64208	0.000897	$3.6E{+}3$	1.598
42.3	0.00143	0.64208	0.000893	$3.7E{+}3$	1.598
42.4	0.00142	0.64207	0.000889	$3.7E{+}3$	1.598
42.5	0.00141	0.64207	0.000885	$3.7E{+}3$	1.598
42.6	0.00141	0.64207	0.000881	$3.7E{+}3$	1.598
42.7	0.0014	0.64206	0.000877	$3.8E{+}3$	1.598
42.8	0.00139	0.64206	0.000872	$3.8E{+}3$	1.598
42.9	0.00139	0.64206	0.000868	$3.8E{+}3$	1.598
43	0.00138	0.64206	0.000864	$3.8E{+}3$	1.598
43.1	0.00138	0.64205	0.00086	$3.9E{+}3$	1.598
43.2	0.00137	0.64205	0.000856	$3.9E{+}3$	1.598
43.3	0.00136	0.64205	0.000852	$3.9E{+}3$	1.598

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{T}{T^*}$	$\frac{T_0}{T_0{}^*}$	$\frac{P}{P^*}$	$\frac{P_0}{P_0{}^*}$	$\frac{\rho^*}{\rho}$
43.4	0.00136	0.64204	0.000849	4.0E+3	1.598
43.5	0.00135	0.64204	0.000845	4.0E+3	1.598
43.6	0.00134	0.64204	0.000841	4.0E+3	1.598
43.7	0.00134	0.64204	0.000837	4.0E+3	1.598
43.8	0.00133	0.64203	0.000833	4.1E+3	1.598
43.9	0.00133	0.64203	0.000829	4.1E+3	1.598
44	0.00132	0.64203	0.000826	4.1E+3	1.598
44.1	0.00131	0.64202	0.000822	4.1E+3	1.598
44.2	0.00131	0.64202	0.000818	4.2E+3	1.598
44.3	0.0013	0.64202	0.000814	4.2E+3	1.598
44.4	0.0013	0.64202	0.000811	4.2E+3	1.598
44.5	0.00129	0.64201	0.000807	4.3E+3	1.598
44.6	0.00128	0.64201	0.000804	4.3E+3	1.598
44.7	0.00128	0.64201	0.0008	4.3E+3	1.598
44.8	0.00127	0.64201	0.000796	4.3E+3	1.598
44.9	0.00127	0.642	0.000793	4.4E+3	1.598
45	0.00126	0.642	0.000789	4.4E+3	1.598
45.1	0.00126	0.642	0.000786	4.4E+3	1.598
45.2	0.00125	0.642	0.000782	4.5E+3	1.598
45.3	0.00124	0.64199	0.000779	4.5E+3	1.598
45.4	0.00124	0.64199	0.000775	4.5E+3	1.598
45.5	0.00123	0.64199	0.000772	4.5E+3	1.598
45.6	0.00123	0.64199	0.000769	4.6E+3	1.598
45.7	0.00122	0.64198	0.000765	4.6E+3	1.598
45.8	0.00122	0.64198	0.000762	4.6E+3	1.598
45.9	0.00121	0.64198	0.000759	4.7E+3	1.598
46	0.00121	0.64198	0.000755	4.7E+3	1.598
46.1	0.0012	0.64197	0.000752	4.7E+3	1.598
46.2	0.0012	0.64197	0.000749	4.8E+3	1.598
46.3	0.00119	0.64197	0.000746	4.8E+3	1.598
46.4	0.00119	0.64197	0.000742	4.8E+3	1.598
46.5	0.00118	0.64197	0.000739	4.9E+3	1.598
46.6	0.00118	0.64196	0.000736	4.9E+3	1.598

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^{*}}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^{*}}$	$\frac{\mathbf{P}}{\mathbf{P}^{*}}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^{*}}$	$\frac{\rho^{*}}{\rho}$
46.7	0.00117	0.64196	0.000733	4.9E+3	1.598
46.8	0.00117	0.64196	0.00073	4.9E+3	1.598
46.9	0.00116	0.64196	0.000727	5.0E+3	1.598
47	0.00116	0.64195	0.000724	5.0E+3	1.598
47.1	0.00115	0.64195	0.000721	5.0E+3	1.598
47.2	0.00115	0.64195	0.000717	5.1E+3	1.598
47.3	0.00114	0.64195	0.000714	5.1E+3	1.598
47.4	0.00114	0.64195	0.000711	5.1E+3	1.598
47.5	0.00113	0.64194	0.000708	5.2E+3	1.598
47.6	0.00113	0.64194	0.000705	5.2E+3	1.598
47.7	0.00112	0.64194	0.000702	5.2E+3	1.598
47.8	0.00112	0.64194	0.0007	5.3E+3	1.598
47.9	0.00111	0.64194	0.000697	5.3E+3	1.598
48	0.00111	0.64193	0.000694	5.3E+3	1.598
48.1	0.0011	0.64193	0.000691	5.4E+3	1.598
48.2	0.0011	0.64193	0.000688	5.4E+3	1.598
48.3	0.0011	0.64193	0.000685	5.4E+3	1.598
48.4	0.00109	0.64192	0.000682	5.5E+3	1.598
48.5	0.00109	0.64192	0.00068	5.5E+3	1.598
48.6	0.00108	0.64192	0.000677	5.5E+3	1.598
48.7	0.00108	0.64192	0.000674	5.6E+3	1.598
48.8	0.00107	0.64192	0.000671	5.6E+3	1.598
48.9	0.00107	0.64191	0.000668	5.6E+3	1.598
49	0.00106	0.64191	0.000666	5.7E+3	1.598
49.1	0.00106	0.64191	0.000663	5.7E+3	1.598
49.2	0.00106	0.64191	0.00066	5.7E+3	1.598
49.3	0.00105	0.64191	0.000658	5.8E+3	1.598
49.4	0.00105	0.64191	0.000655	5.8E+3	1.598
49.5	0.00104	0.6419	0.000652	5.8E+3	1.598
49.6	0.00104	0.6419	0.00065	5.9E+3	1.598
49.7	0.00103	0.6419	0.000647	5.9E+3	1.598
49.8	0.00103	0.6419	0.000645	6.0E+3	1.598
49.9	0.00103	0.6419	0.000642	6.0E+3	1.598

Table 6.4: Rayleigh Flow Table for k=1.67 (continue)

M	$\frac{\mathbf{T}}{\mathbf{T}^*}$	$\frac{\mathbf{T_0}}{\mathbf{T_0}^*}$	$\frac{\mathbf{P}}{\mathbf{P}^*}$	$\frac{\mathbf{P_0}}{\mathbf{P_0}^*}$	$\frac{\rho^*}{\rho}$
50.0	0.00102	0.64189	0.000639	$6.0E+3$	1.598

Chapter 7

Prandtl-Meyer Function

7.1 Prandtl-Meyer Function for k=1.2

Table 7.1: Prandtl–Meyer function for k=1.2

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
1.0	0.0	0.56447	0.90909	0.62092	45
1.01	0.048835	0.55832	0.90743	0.61528	45.29
1.02	0.13736	0.55219	0.90576	0.60964	45.57
1.03	0.25097	0.54608	0.90409	0.60401	45.85
1.04	0.38429	0.53999	0.9024	0.59839	46.12
1.05	0.53415	0.53392	0.9007	0.59278	46.4
1.06	0.69838	0.52787	0.89899	0.58718	46.67
1.07	0.87535	0.52185	0.89727	0.58159	46.94
1.08	1.064	0.51585	0.89554	0.57602	47.2
1.09	1.263	0.50987	0.89381	0.57045	47.47
1.1	1.471	0.50393	0.89206	0.5649	47.73
1.11	1.688	0.49801	0.89031	0.55936	47.98
1.12	1.914	0.49211	0.88854	0.55385	48.24
1.13	2.147	0.48625	0.88677	0.54834	48.49
1.14	2.387	0.48042	0.88499	0.54286	48.74
1.15	2.633	0.47462	0.8832	0.53739	48.99
1.16	2.886	0.46885	0.8814	0.53194	49.24
1.17	3.145	0.46312	0.87959	0.52651	49.48

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
1.18	3.409	0.45741	0.87778	0.5211	49.72
1.19	3.679	0.45175	0.87596	0.51572	49.96
1.2	3.953	0.44611	0.87413	0.51035	50.19
1.21	4.233	0.44051	0.87229	0.50501	50.43
1.22	4.516	0.43495	0.87044	0.49969	50.66
1.23	4.804	0.42943	0.86859	0.4944	50.89
1.24	5.096	0.42394	0.86673	0.48913	51.12
1.25	5.391	0.41849	0.86486	0.48388	51.34
1.26	5.69	0.41308	0.86299	0.47867	51.56
1.27	5.993	0.40771	0.86111	0.47347	51.78
1.28	6.298	0.40238	0.85922	0.46831	52
1.29	6.607	0.39709	0.85733	0.46317	52.22
1.3	6.919	0.39184	0.85543	0.45807	52.43
1.31	7.234	0.38664	0.85353	0.45299	52.64
1.32	7.551	0.38147	0.85161	0.44794	52.85
1.33	7.871	0.37634	0.8497	0.44292	53.06
1.34	8.193	0.37126	0.84777	0.43793	53.27
1.35	8.517	0.36622	0.84584	0.43297	53.47
1.36	8.844	0.36123	0.84391	0.42804	53.67
1.37	9.173	0.35627	0.84197	0.42314	53.87
1.38	9.503	0.35136	0.84003	0.41828	54.07
1.39	9.836	0.3465	0.83808	0.41344	54.27
1.4	10.17	0.34167	0.83612	0.40864	54.46
1.41	10.51	0.3369	0.83416	0.40388	54.65
1.42	10.84	0.33216	0.8322	0.39914	54.85
1.43	11.18	0.32748	0.83023	0.39444	55.03
1.44	11.52	0.32283	0.82825	0.38978	55.22
1.45	11.87	0.31824	0.82628	0.38515	55.41
1.46	12.21	0.31368	0.82429	0.38055	55.59
1.47	12.55	0.30918	0.82231	0.37599	55.77
1.48	12.9	0.30471	0.82032	0.37146	55.95
1.49	13.25	0.3003	0.81832	0.36697	56.13
1.5	13.6	0.29593	0.81633	0.36251	56.31

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
1.51	13.94	0.2916	0.81433	0.35809	56.49
1.52	14.29	0.28732	0.81232	0.3537	56.66
1.53	14.65	0.28309	0.81031	0.34935	56.83
1.54	15	0.2789	0.8083	0.34504	57
1.55	15.35	0.27475	0.80629	0.34076	57.17
1.56	15.7	0.27066	0.80427	0.33652	57.34
1.57	16.06	0.2666	0.80225	0.33232	57.51
1.58	16.41	0.2626	0.80023	0.32815	57.67
1.59	16.77	0.25864	0.79821	0.32402	57.83
1.6	17.12	0.25472	0.79618	0.31993	57.99
1.61	17.48	0.25085	0.79415	0.31587	58.15
1.62	17.84	0.24702	0.79212	0.31185	58.31
1.63	18.19	0.24324	0.79008	0.30787	58.47
1.64	18.55	0.2395	0.78805	0.30392	58.63
1.65	18.91	0.23581	0.78601	0.30001	58.78
1.66	19.27	0.23216	0.78397	0.29614	58.93
1.67	19.63	0.22856	0.78193	0.2923	59.09
1.68	19.99	0.225	0.77989	0.28851	59.24
1.69	20.34	0.22149	0.77784	0.28474	59.39
1.7	20.7	0.21801	0.7758	0.28102	59.53
1.71	21.06	0.21458	0.77375	0.27733	59.68
1.72	21.42	0.2112	0.7717	0.27368	59.83
1.73	21.78	0.20786	0.76965	0.27007	59.97
1.74	22.14	0.20456	0.7676	0.26649	60.11
1.75	22.5	0.2013	0.76555	0.26295	60.26
1.76	22.86	0.19808	0.7635	0.25944	60.4
1.77	23.22	0.19491	0.76145	0.25597	60.53
1.78	23.58	0.19178	0.75939	0.25254	60.67
1.79	23.94	0.18869	0.75734	0.24915	60.81
1.8	24.3	0.18564	0.75529	0.24579	60.95
1.81	24.66	0.18263	0.75323	0.24246	61.08
1.82	25.02	0.17966	0.75118	0.23918	61.21
1.83	25.38	0.17674	0.74913	0.23592	61.35

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
1.84	25.74	0.17385	0.74707	0.23271	61.48
1.85	26.1	0.171	0.74502	0.22953	61.61
1.86	26.46	0.16819	0.74296	0.22638	61.74
1.87	26.82	0.16542	0.74091	0.22327	61.86
1.88	27.18	0.16269	0.73886	0.22019	61.99
1.89	27.53	0.16	0.73681	0.21715	62.12
1.9	27.89	0.15734	0.73475	0.21415	62.24
1.91	28.25	0.15473	0.7327	0.21117	62.37
1.92	28.61	0.15215	0.73065	0.20824	62.49
1.93	28.97	0.1496	0.7286	0.20533	62.61
1.94	29.32	0.1471	0.72655	0.20246	62.73
1.95	29.68	0.14463	0.72451	0.19962	62.85
1.96	30.04	0.14219	0.72246	0.19682	62.97
1.97	30.39	0.1398	0.72041	0.19405	63.09
1.98	30.75	0.13743	0.71837	0.19131	63.2
1.99	31.1	0.1351	0.71633	0.18861	63.32
2	31.46	0.13281	0.71429	0.18593	63.43
2.02	32.16	0.12832	0.71021	0.18069	63.66
2.04	32.87	0.12397	0.70613	0.17557	63.89
2.06	33.57	0.11975	0.70207	0.17057	64.11
2.08	34.28	0.11566	0.69801	0.1657	64.32
2.1	34.98	0.11169	0.69396	0.16095	64.54
2.12	35.68	0.10784	0.68992	0.15631	64.75
2.14	36.37	0.10412	0.68589	0.1518	64.95
2.16	37.07	0.10051	0.68187	0.1474	65.16
2.18	37.76	0.097012	0.67786	0.14312	65.36
2.2	38.45	0.093626	0.67385	0.13894	65.56
2.22	39.13	0.090348	0.66986	0.13488	65.75
2.24	39.82	0.087176	0.66589	0.13092	65.94
2.26	40.5	0.084106	0.66192	0.12706	66.13
2.28	41.18	0.081136	0.65796	0.12331	66.32
2.3	41.85	0.078263	0.65402	0.11966	66.5
2.32	42.53	0.075484	0.65009	0.11611	66.68

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
2.34	43.2	0.072797	0.64618	0.11266	66.86
2.36	43.87	0.0702	0.64228	0.1093	67.04
2.38	44.53	0.067689	0.63839	0.10603	67.21
2.4	45.19	0.065262	0.63452	0.10285	67.38
2.42	45.85	0.062918	0.63066	0.099765	67.55
2.44	46.51	0.060652	0.62682	0.096762	67.71
2.46	47.16	0.058464	0.62299	0.093844	67.88
2.48	47.81	0.056351	0.61918	0.091009	68.04
2.5	48.46	0.05431	0.61538	0.088254	68.2
2.52	49.11	0.05234	0.61161	0.085577	68.36
2.54	49.75	0.050437	0.60784	0.082977	68.51
2.56	50.39	0.048601	0.6041	0.080452	68.66
2.58	51.02	0.046829	0.60037	0.078	68.81
2.6	51.66	0.045119	0.59666	0.075619	68.96
2.62	52.28	0.043468	0.59297	0.073307	69.11
2.64	52.91	0.041876	0.58929	0.071063	69.25
2.66	53.53	0.040341	0.58563	0.068884	69.4
2.68	54.16	0.038859	0.58199	0.06677	69.54
2.7	54.77	0.037431	0.57837	0.064718	69.68
2.72	55.39	0.036053	0.57477	0.062727	69.81
2.74	56	0.034725	0.57118	0.060795	69.95
2.76	56.61	0.033444	0.56761	0.05892	70.08
2.78	57.21	0.032209	0.56407	0.057102	70.22
2.8	57.81	0.031019	0.56054	0.055338	70.35
2.82	58.41	0.029872	0.55703	0.053627	70.47
2.84	59	0.028766	0.55354	0.051968	70.6
2.86	59.6	0.027701	0.55007	0.050359	70.73
2.88	60.19	0.026674	0.54662	0.048799	70.85
2.9	60.77	0.025685	0.54318	0.047286	70.97
2.92	61.35	0.024732	0.53977	0.045819	71.1
2.94	61.93	0.023813	0.53638	0.044397	71.21
2.96	62.51	0.022929	0.533	0.043018	71.33
2.98	63.08	0.022077	0.52965	0.041682	71.45

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
3	63.65	0.021256	0.52632	0.040386	71.57
3.02	64.22	0.020465	0.523	0.03913	71.68
3.04	64.79	0.019704	0.51971	0.037914	71.79
3.06	65.35	0.018971	0.51643	0.036734	71.9
3.08	65.9	0.018265	0.51318	0.035591	72.01
3.1	66.46	0.017585	0.50994	0.034484	72.12
3.12	67.01	0.01693	0.50673	0.03341	72.23
3.14	67.56	0.0163	0.50353	0.03237	72.33
3.16	68.1	0.015693	0.50036	0.031363	72.44
3.18	68.65	0.015108	0.49721	0.030386	72.54
3.2	69.19	0.014546	0.49407	0.029441	72.65
3.22	69.72	0.014004	0.49096	0.028524	72.75
3.24	70.26	0.013483	0.48786	0.027637	72.85
3.26	70.79	0.012981	0.48479	0.026777	72.95
3.28	71.31	0.012498	0.48173	0.025944	73.04
3.3	71.84	0.012033	0.4787	0.025137	73.14
3.32	72.36	0.011585	0.47568	0.024355	73.24
3.34	72.88	0.011154	0.47269	0.023598	73.33
3.36	73.39	0.01074	0.46971	0.022865	73.43
3.38	73.9	0.010341	0.46676	0.022154	73.52
3.4	74.41	0.00996	0.46382	0.021466	73.61
3.42	74.92	0.00959	0.46091	0.0208	73.7
3.44	75.42	0.00923	0.45801	0.020155	73.79
3.46	75.92	0.00889	0.45513	0.01953	73.88
3.48	76.42	0.00856	0.45228	0.018924	73.97
3.5	76.92	0.00824	0.44944	0.018338	74.05
3.52	77.41	0.00794	0.44662	0.01777	74.14
3.54	77.9	0.00764	0.44382	0.01722	74.23
3.56	78.39	0.00736	0.44104	0.016688	74.31
3.58	78.87	0.00709	0.43828	0.016172	74.39
3.6	79.35	0.00683	0.43554	0.015673	74.48
3.62	79.83	0.00657	0.43282	0.015189	74.56
3.64	80.3	0.00633	0.43011	0.014721	74.64

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
3.66	80.78	0.0061	0.42743	0.014267	74.72
3.68	81.25	0.00587	0.42477	0.013828	74.8
3.7	81.71	0.00566	0.42212	0.013402	74.88
3.72	82.18	0.00545	0.41949	0.01299	74.95
3.74	82.64	0.00525	0.41688	0.012591	75.03
3.76	83.1	0.00506	0.41429	0.012205	75.11
3.78	83.55	0.00487	0.41172	0.011831	75.18
3.8	84.01	0.00469	0.40917	0.011468	75.26
3.82	84.46	0.00452	0.40663	0.011117	75.33
3.84	84.91	0.00436	0.40411	0.010777	75.4
3.86	85.35	0.0042	0.40161	0.010448	75.48
3.88	85.8	0.00404	0.39913	0.010129	75.55
3.9	86.24	0.0039	0.39667	0.00982	75.62
3.92	86.67	0.00375	0.39422	0.00952	75.69
3.94	87.11	0.00362	0.39179	0.00923	75.76
3.96	87.54	0.00349	0.38938	0.00895	75.83
3.98	87.97	0.00336	0.38699	0.00868	75.9
4	88.4	0.00324	0.38462	0.00842	75.96
4.02	88.83	0.00312	0.38226	0.00816	76.03
4.04	89.25	0.00301	0.37992	0.00791	76.1
4.06	89.67	0.0029	0.37759	0.00768	76.16
4.08	90.09	0.00279	0.37529	0.00744	76.23
4.1	90.5	0.00269	0.373	0.00722	76.29
4.12	90.92	0.0026	0.37072	0.007	76.36
4.14	91.33	0.0025	0.36847	0.00679	76.42
4.16	91.74	0.00241	0.36623	0.00659	76.48
4.18	92.14	0.00233	0.364	0.00639	76.55
4.2	92.55	0.00224	0.36179	0.0062	76.61
4.22	92.95	0.00216	0.3596	0.00601	76.67
4.24	93.35	0.00209	0.35743	0.00583	76.73
4.26	93.74	0.00201	0.35527	0.00566	76.79
4.28	94.14	0.00194	0.35313	0.00549	76.85
4.3	94.53	0.00187	0.351	0.00533	76.91

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
4.32	94.92	0.0018	0.34889	0.00517	76.97
4.34	95.31	0.00174	0.34679	0.00502	77.02
4.36	95.7	0.00168	0.34471	0.00487	77.08
4.38	96.08	0.00162	0.34265	0.00472	77.14
4.4	96.46	0.00156	0.3406	0.00458	77.2
4.42	96.84	0.00151	0.33857	0.00445	77.25
4.44	97.22	0.00145	0.33655	0.00432	77.31
4.46	97.59	0.0014	0.33454	0.00419	77.36
4.48	97.96	0.00135	0.33255	0.00407	77.42
4.5	98.33	0.00131	0.33058	0.00395	77.47
4.52	98.7	0.00126	0.32862	0.00383	77.52
4.54	99.07	0.00122	0.32667	0.00372	77.58
4.56	99.43	0.00117	0.32474	0.00361	77.63
4.58	99.79	0.00113	0.32283	0.00351	77.68
4.6	$1.0E{+}2$	0.00109	0.32092	0.0034	77.74
4.62	$1.0E{+}2$	0.00105	0.31904	0.00331	77.79
4.64	$1.0E{+}2$	0.00102	0.31716	0.00321	77.84
4.66	$1.0E{+}2$	0.000983	0.3153	0.00312	77.89
4.68	$1.0E{+}2$	0.000949	0.31346	0.00303	77.94
4.7	$1.0E{+}2$	0.000916	0.31162	0.00294	77.99
4.72	$1.0E{+}2$	0.000884	0.3098	0.00285	78.04
4.74	$1.0E{+}2$	0.000854	0.308	0.00277	78.09
4.76	$1.0E{+}2$	0.000824	0.30621	0.00269	78.14
4.78	$1.0E{+}2$	0.000796	0.30443	0.00261	78.18
4.8	$1.0E{+}2$	0.000769	0.30266	0.00254	78.23
4.82	$1.0E{+}2$	0.000742	0.30091	0.00247	78.28
4.84	$1.0E{+}2$	0.000717	0.29917	0.0024	78.33
4.86	$1.0E{+}2$	0.000693	0.29745	0.00233	78.37
4.88	$1.0E{+}2$	0.000669	0.29573	0.00226	78.42
4.9	$1.1E{+}2$	0.000646	0.29403	0.0022	78.47
4.92	$1.1E{+}2$	0.000624	0.29234	0.00214	78.51
4.94	$1.1E{+}2$	0.000603	0.29067	0.00207	78.56
4.96	$1.1E{+}2$	0.000583	0.289	0.00202	78.6

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
4.98	$1.1E{+}2$	0.000563	0.28735	0.00196	78.65
5	$1.1E{+}2$	0.000544	0.28571	0.0019	78.69
5.04	$1.1E{+}2$	0.000508	0.28247	0.0018	78.78
5.08	$1.1E{+}2$	0.000474	0.27928	0.0017	78.86
5.12	$1.1E{+}2$	0.000443	0.27613	0.00161	78.95
5.16	$1.1E{+}2$	0.000414	0.27303	0.00152	79.03
5.2	$1.1E{+}2$	0.000387	0.26998	0.00143	79.11
5.24	$1.1E{+}2$	0.000362	0.26697	0.00136	79.2
5.28	$1.1E{+}2$	0.000339	0.264	0.00128	79.28
5.32	$1.1E{+}2$	0.000317	0.26108	0.00121	79.35
5.36	$1.1E{+}2$	0.000296	0.2582	0.00115	79.43
5.4	$1.1E{+}2$	0.000277	0.25536	0.00109	79.51
5.44	$1.1E{+}2$	0.00026	0.25257	0.00103	79.58
5.48	$1.1E{+}2$	0.000243	0.24981	0.000973	79.66
5.52	$1.1E{+}2$	0.000228	0.24709	0.000921	79.73
5.56	$1.2E{+}2$	0.000213	0.24442	0.000872	79.8
5.6	$1.2E{+}2$	0.0002	0.24178	0.000826	79.88
5.64	$1.2E{+}2$	0.000187	0.23918	0.000783	79.95
5.68	$1.2E{+}2$	0.000175	0.23662	0.000742	80.02
5.72	$1.2E{+}2$	0.000165	0.23409	0.000703	80.08
5.76	$1.2E{+}2$	0.000154	0.2316	0.000666	80.15
5.8	$1.2E{+}2$	0.000145	0.22915	0.000632	80.22
5.84	$1.2E{+}2$	0.000136	0.22673	0.000599	80.28
5.88	$1.2E{+}2$	0.000127	0.22434	0.000568	80.35
5.92	$1.2E{+}2$	0.00012	0.22199	0.000539	80.41
5.96	$1.2E{+}2$	0.000112	0.21968	0.000512	80.48
6	$1.2E{+}2$	0.000106	0.21739	0.000486	80.54
6.04	$1.2E{+}2$	$9.92E{-}5$	0.21514	0.000461	80.6
6.08	$1.2E{+}2$	$9.32E{-}5$	0.21292	0.000438	80.66
6.12	$1.2E{+}2$	$8.76E{-}5$	0.21073	0.000416	80.72
6.16	$1.2E{+}2$	$8.23E{-}5$	0.20857	0.000395	80.78
6.2	$1.2E{+}2$	$7.74E{-}5$	0.20644	0.000375	80.84
6.24	$1.2E{+}2$	$7.28E{-}5$	0.20434	0.000356	80.9

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
6.28	$1.2E{+}2$	$6.85E{-}5$	0.20227	0.000339	80.95
6.32	$1.2E{+}2$	$6.44E{-}5$	0.20023	0.000322	81.01
6.36	$1.3E{+}2$	$6.07E{-}5$	0.19822	0.000306	81.06
6.4	$1.3E{+}2$	$5.71E{-}5$	0.19623	0.000291	81.12
6.44	$1.3E{+}2$	$5.38E{-}5$	0.19427	0.000277	81.17
6.48	$1.3E{+}2$	$5.06E{-}5$	0.19234	0.000263	81.23
6.52	$1.3E{+}2$	$4.77E{-}5$	0.19044	0.00025	81.28
6.56	$1.3E{+}2$	$4.49E{-}5$	0.18856	0.000238	81.33
6.6	$1.3E{+}2$	$4.24E{-}5$	0.18671	0.000227	81.38
6.64	$1.3E{+}2$	$3.99E{-}5$	0.18488	0.000216	81.44
6.68	$1.3E{+}2$	$3.77E{-}5$	0.18308	0.000206	81.49
6.72	$1.3E{+}2$	$3.55E{-}5$	0.1813	0.000196	81.54
6.76	$1.3E{+}2$	$3.35E{-}5$	0.17954	0.000187	81.59
6.8	$1.3E{+}2$	$3.16E{-}5$	0.17781	0.000178	81.63
6.84	$1.3E{+}2$	$2.98E{-}5$	0.1761	0.000169	81.68
6.88	$1.3E{+}2$	$2.82E{-}5$	0.17442	0.000161	81.73
6.92	$1.3E{+}2$	$2.66E{-}5$	0.17275	0.000154	81.78
6.96	$1.3E{+}2$	$2.51E{-}5$	0.17111	0.000147	81.82
7	$1.3E{+}2$	$2.37E{-}5$	0.16949	0.00014	81.87
7.04	$1.3E{+}2$	$2.24E{-}5$	0.16789	0.000133	81.92
7.08	$1.3E{+}2$	$2.12E{-}5$	0.16632	0.000127	81.96
7.12	$1.3E{+}2$	$2.0E-5$	0.16476	0.000121	82.01
7.16	$1.3E{+}2$	$1.89E{-}5$	0.16322	0.000116	82.05
7.2	$1.3E{+}2$	$1.79E{-}5$	0.16171	0.000111	82.09
7.24	$1.3E{+}2$	$1.69E{-}5$	0.16021	0.000106	82.14
7.28	$1.3E{+}2$	$1.6E-5$	0.15873	0.000101	82.18
7.32	$1.3E{+}2$	$1.51E{-}5$	0.15728	$9.62E{-}5$	82.22
7.36	$1.4E{+}2$	$1.43E{-}5$	0.15584	$9.19E{-}5$	82.26
7.4	$1.4E{+}2$	$1.36E{-}5$	0.15442	$8.78E{-}5$	82.3
7.44	$1.4E{+}2$	$1.28E{-}5$	0.15301	$8.39E{-}5$	82.34
7.48	$1.4E{+}2$	$1.22E{-}5$	0.15163	$8.02E{-}5$	82.39
7.52	$1.4E{+}2$	$1.15E{-}5$	0.15026	$7.66E{-}5$	82.43
7.56	$1.4E{+}2$	$1.09E{-}5$	0.14891	$7.32E{-}5$	82.46

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
7.6	$1.4E{+}2$	$1.03E{-}5$	0.14758	$7.0E-5$	82.5
7.64	$1.4E{+}2$	$9.79E{-}6$	0.14626	$6.69E{-}5$	82.54
7.68	$1.4E{+}2$	$9.28E{-}6$	0.14496	$6.4E-5$	82.58
7.72	$1.4E{+}2$	$8.8E-6$	0.14368	$6.12E{-}5$	82.62
7.76	$1.4E{+}2$	$8.34E{-}6$	0.14241	$5.86E{-}5$	82.66
7.8	$1.4E{+}2$	$7.91E{-}6$	0.14116	$5.61E{-}5$	82.69
7.84	$1.4E{+}2$	$7.51E{-}6$	0.13993	$5.36E{-}5$	82.73
7.88	$1.4E{+}2$	$7.12E{-}6$	0.13871	$5.13E{-}5$	82.77
7.92	$1.4E{+}2$	$6.76E{-}6$	0.1375	$4.92E{-}5$	82.8
7.96	$1.4E{+}2$	$6.41E{-}6$	0.13631	$4.71E{-}5$	82.84
8	$1.4E{+}2$	$6.09E{-}6$	0.13514	$4.51E{-}5$	82.87
8.04	$1.4E{+}2$	$5.78E{-}6$	0.13397	$4.32E{-}5$	82.91
8.08	$1.4E{+}2$	$5.49E{-}6$	0.13283	$4.13E{-}5$	82.94
8.12	$1.4E{+}2$	$5.22E{-}6$	0.13169	$3.96E{-}5$	82.98
8.16	$1.4E{+}2$	$4.96E{-}6$	0.13057	$3.8E-5$	83.01
8.2	$1.4E{+}2$	$4.71E{-}6$	0.12947	$3.64E{-}5$	83.05
8.24	$1.4E{+}2$	$4.48E{-}6$	0.12837	$3.49E{-}5$	83.08
8.28	$1.4E{+}2$	$4.25E{-}6$	0.12729	$3.34E{-}5$	83.11
8.32	$1.4E{+}2$	$4.04E{-}6$	0.12623	$3.2E-5$	83.15
8.36	$1.4E{+}2$	$3.85E{-}6$	0.12517	$3.07E{-}5$	83.18
8.4	$1.4E{+}2$	$3.66E{-}6$	0.12413	$2.95E{-}5$	83.21
8.44	$1.4E{+}2$	$3.48E{-}6$	0.1231	$2.83E{-}5$	83.24
8.48	$1.4E{+}2$	$3.31E{-}6$	0.12208	$2.71E{-}5$	83.27
8.52	$1.4E{+}2$	$3.15E{-}6$	0.12108	$2.6E-5$	83.31
8.56	$1.4E{+}2$	$3.0E-6$	0.12009	$2.5E-5$	83.34
8.6	$1.4E{+}2$	$2.85E{-}6$	0.1191	$2.4E-5$	83.37
8.64	$1.5E{+}2$	$2.72E{-}6$	0.11813	$2.3E-5$	83.4
8.68	$1.5E{+}2$	$2.59E{-}6$	0.11718	$2.21E{-}5$	83.43
8.72	$1.5E{+}2$	$2.47E{-}6$	0.11623	$2.12E{-}5$	83.46
8.76	$1.5E{+}2$	$2.35E{-}6$	0.11529	$2.04E{-}5$	83.49
8.8	$1.5E{+}2$	$2.24E{-}6$	0.11436	$1.96E{-}5$	83.52
8.84	$1.5E{+}2$	$2.13E{-}6$	0.11345	$1.88E{-}5$	83.55
8.88	$1.5E{+}2$	$2.03E{-}6$	0.11254	$1.81E{-}5$	83.57

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
8.92	$1.5E{+}2$	$1.94E{-}6$	0.11165	$1.73E{-}5$	83.6
8.96	$1.5E{+}2$	$1.85E{-}6$	0.11076	$1.67E{-}5$	83.63
9	$1.5E{+}2$	$1.76E{-}6$	0.10989	$1.6E-5$	83.66
9.04	$1.5E{+}2$	$1.68E{-}6$	0.10903	$1.54E{-}5$	83.69
9.08	$1.5E{+}2$	$1.6E-6$	0.10817	$1.48E{-}5$	83.72
9.12	$1.5E{+}2$	$1.53E{-}6$	0.10733	$1.42E{-}5$	83.74
9.16	$1.5E{+}2$	$1.46E{-}6$	0.10649	$1.37E{-}5$	83.77
9.2	$1.5E{+}2$	$1.39E{-}6$	0.10566	$1.32E{-}5$	83.8
9.24	$1.5E{+}2$	$1.33E{-}6$	0.10485	$1.27E{-}5$	83.82
9.28	$1.5E{+}2$	$1.27E{-}6$	0.10404	$1.22E{-}5$	83.85
9.32	$1.5E{+}2$	0.0	0.10324	$1.17E{-}5$	83.88
9.36	$1.5E{+}2$	0.0	0.10245	$1.13E{-}5$	83.9
9.4	$1.5E{+}2$	0.0	0.10167	$1.09E{-}5$	83.93
9.44	$1.5E{+}2$	0.0	0.10089	$1.05E{-}5$	83.95
9.48	$1.5E{+}2$	0.0	0.10013	$1.01E{-}5$	83.98
9.52	$1.5E{+}2$	0.0	0.099374	$9.69E{-}6$	84
9.56	$1.5E{+}2$	0.0	0.098626	$9.33E{-}6$	84.03
9.6	$1.5E{+}2$	0.0	0.097886	$8.99E{-}6$	84.05
9.64	$1.5E{+}2$	0.0	0.097154	$8.66E{-}6$	84.08
9.68	$1.5E{+}2$	0.0	0.09643	$8.34E{-}6$	84.1
9.72	$1.5E{+}2$	0.0	0.095714	$8.03E{-}6$	84.13
9.76	$1.5E{+}2$	0.0	0.095005	$7.74E{-}6$	84.15
9.8	$1.5E{+}2$	0.0	0.094304	$7.46E{-}6$	84.17
9.84	$1.5E{+}2$	0.0	0.093611	$7.19E{-}6$	84.2
9.88	$1.5E{+}2$	0.0	0.092924	$6.93E{-}6$	84.22
9.92	$1.5E{+}2$	0.0	0.092245	$6.68E{-}6$	84.24
9.96	$1.5E{+}2$	0.0	0.091574	$6.44E{-}6$	84.27
10	$1.5E{+}2$	0.0	0.090909	$6.21E{-}6$	84.29
10.1	$1.5E{+}2$	0.0	0.089278	$5.67E{-}6$	84.35
10.2	$1.5E{+}2$	0.0	0.087689	$5.18E{-}6$	84.4
10.3	$1.5E{+}2$	0.0	0.08614	$4.74E{-}6$	84.45
10.4	$1.6E{+}2$	0.0	0.084631	$4.34E{-}6$	84.51
10.5	$1.6E{+}2$	0.0	0.08316	$3.98E{-}6$	84.56

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
10.6	$1.6E{+}2$	0.0	0.081726	$3.65E{-}6$	84.61
10.7	$1.6E{+}2$	0.0	0.080328	$3.34E{-}6$	84.66
10.8	$1.6E{+}2$	0.0	0.078964	$3.07E{-}6$	84.71
10.9	$1.6E{+}2$	0.0	0.077634	$2.82E{-}6$	84.76
11	$1.6E{+}2$	0.0	0.076336	$2.59E{-}6$	84.81
11.1	$1.6E{+}2$	0.0	0.075069	$2.38E{-}6$	84.85
11.2	$1.6E{+}2$	0.0	0.073833	$2.19E{-}6$	84.9
11.3	$1.6E{+}2$	0.0	0.072627	$2.02E{-}6$	84.94
11.4	$1.6E{+}2$	0.0	0.071449	$1.86E{-}6$	84.99
11.5	$1.6E{+}2$	0.0	0.070299	$1.72E{-}6$	85.03
11.6	$1.6E{+}2$	0.0	0.069175	$1.58E{-}6$	85.07
11.7	$1.6E{+}2$	0.0	0.068078	$1.46E{-}6$	85.11
11.8	$1.6E{+}2$	0.0	0.067006	$1.35E{-}6$	85.16
11.9	$1.6E{+}2$	0.0	0.065959	0.0	85.2
12	$1.6E{+}2$	0.0	0.064935	0.0	85.24
12.1	$1.6E{+}2$	0.0	0.063935	0.0	85.28
12.2	$1.6E{+}2$	0.0	0.062956	0.0	85.31
12.3	$1.6E{+}2$	0.0	0.062	0.0	85.35
12.4	$1.6E{+}2$	0.0	0.061065	0.0	85.39
12.5	$1.6E{+}2$	0.0	0.06015	0.0	85.43
12.6	$1.6E{+}2$	0.0	0.059256	0.0	85.46
12.7	$1.6E{+}2$	0.0	0.058381	0.0	85.5
12.8	$1.6E{+}2$	0.0	0.057524	0.0	85.53
12.9	$1.6E{+}2$	0.0	0.056686	0.0	85.57
13	$1.7E{+}2$	0.0	0.055866	0.0	85.6
13.1	$1.7E{+}2$	0.0	0.055063	0.0	85.63
13.2	$1.7E{+}2$	0.0	0.054277	0.0	85.67
13.3	$1.7E{+}2$	0.0	0.053507	0.0	85.7
13.4	$1.7E{+}2$	0.0	0.052754	0.0	85.73
13.5	$1.7E{+}2$	0.0	0.052016	0.0	85.76
13.6	$1.7E{+}2$	0.0	0.051293	0.0	85.79
13.7	$1.7E{+}2$	0.0	0.050584	0.0	85.83
13.8	$1.7E{+}2$	0.0	0.04989	0.0	85.86

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
13.9	$1.7E{+}2$	0.0	0.04921	0.0	85.89
14	$1.7E{+}2$	0.0	0.048544	0.0	85.91
14.1	$1.7E{+}2$	0.0	0.04789	0.0	85.94
14.2	$1.7E{+}2$	0.0	0.04725	0.0	85.97
14.3	$1.7E{+}2$	0.0	0.046622	0.0	86
14.4	$1.7E{+}2$	0.0	0.046007	0.0	86.03
14.5	$1.7E{+}2$	0.0	0.045403	0.0	86.05
14.6	$1.7E{+}2$	0.0	0.044811	0.0	86.08
14.7	$1.7E{+}2$	0.0	0.04423	0.0	86.11
14.8	$1.7E{+}2$	0.0	0.04366	0.0	86.13
14.9	$1.7E{+}2$	0.0	0.043102	0.0	86.16
15	$1.7E{+}2$	0.0	0.042553	0.0	86.19
15.1	$1.7E{+}2$	0.0	0.042015	0.0	86.21
15.2	$1.7E{+}2$	0.0	0.041487	0.0	86.24
15.3	$1.7E{+}2$	0.0	0.040968	0.0	86.26
15.4	$1.7E{+}2$	0.0	0.04046	0.0	86.28
15.5	$1.7E{+}2$	0.0	0.03996	0.0	86.31
15.6	$1.7E{+}2$	0.0	0.03947	0.0	86.33
15.7	$1.7E{+}2$	0.0	0.038988	0.0	86.36
15.8	$1.7E{+}2$	0.0	0.038515	0.0	86.38
15.9	$1.7E{+}2$	0.0	0.03805	0.0	86.4
16	$1.7E{+}2$	0.0	0.037594	0.0	86.42
16.1	$1.7E{+}2$	0.0	0.037146	0.0	86.45
16.2	$1.7E{+}2$	0.0	0.036705	0.0	86.47
16.3	$1.7E{+}2$	0.0	0.036273	0.0	86.49
16.4	$1.7E{+}2$	0.0	0.035847	0.0	86.51
16.5	$1.7E{+}2$	0.0	0.03543	0.0	86.53
16.6	$1.7E{+}2$	0.0	0.035019	0.0	86.55
16.7	$1.7E{+}2$	0.0	0.034615	0.0	86.57
16.8	$1.7E{+}2$	0.0	0.034218	0.0	86.59
16.9	$1.8E{+}2$	0.0	0.033828	0.0	86.61
17	$1.8E{+}2$	0.0	0.033445	0.0	86.63
17.1	$1.8E{+}2$	0.0	0.033068	0.0	86.65

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
17.2	1.8E+2	0.0	0.032697	0.0	86.67
17.3	1.8E+2	0.0	0.032332	0.0	86.69
17.4	1.8E+2	0.0	0.031973	0.0	86.71
17.5	1.8E+2	0.0	0.031621	0.0	86.73
17.6	1.8E+2	0.0	0.031273	0.0	86.75
17.7	1.8E+2	0.0	0.030932	0.0	86.77
17.8	1.8E+2	0.0	0.030596	0.0	86.78
17.9	1.8E+2	0.0	0.030265	0.0	86.8
18	1.8E+2	0.0	0.02994	0.0	86.82
18.1	1.8E+2	0.0	0.02962	0.0	86.84
18.2	1.8E+2	0.0	0.029305	0.0	86.86
18.3	1.8E+2	0.0	0.028995	0.0	86.87
18.4	1.8E+2	0.0	0.028689	0.0	86.89
18.5	1.8E+2	0.0	0.028389	0.0	86.91
18.6	1.8E+2	0.0	0.028093	0.0	86.92
18.7	1.8E+2	0.0	0.027802	0.0	86.94
18.8	1.8E+2	0.0	0.027515	0.0	86.96
18.9	1.8E+2	0.0	0.027232	0.0	86.97
19	1.8E+2	0.0	0.026954	0.0	86.99
19.1	1.8E+2	0.0	0.02668	0.0	87
19.2	1.8E+2	0.0	0.02641	0.0	87.02
19.3	1.8E+2	0.0	0.026144	0.0	87.03
19.4	1.8E+2	0.0	0.025883	0.0	87.05
19.5	1.8E+2	0.0	0.025625	0.0	87.06
19.6	1.8E+2	0.0	0.02537	0.0	87.08
19.7	1.8E+2	0.0	0.02512	0.0	87.09
19.8	1.8E+2	0.0	0.024873	0.0	87.11
19.9	1.8E+2	0.0	0.02463	0.0	87.12
20	1.8E+2	0.0	0.02439	0.0	87.14
20.1	1.8E+2	0.0	0.024154	0.0	87.15
20.2	1.8E+2	0.0	0.023921	0.0	87.17
20.3	1.8E+2	0.0	0.023692	0.0	87.18
20.4	1.8E+2	0.0	0.023465	0.0	87.19

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
20.5	$1.8E{+}2$	0.0	0.023242	0.0	87.21
20.6	$1.8E{+}2$	0.0	0.023022	0.0	87.22
20.7	$1.8E{+}2$	0.0	0.022806	0.0	87.23
20.8	$1.8E{+}2$	0.0	0.022592	0.0	87.25
20.9	$1.8E{+}2$	0.0	0.022381	0.0	87.26
21	$1.8E{+}2$	0.0	0.022173	0.0	87.27
21.1	$1.8E{+}2$	0.0	0.021968	0.0	87.29
21.2	$1.8E{+}2$	0.0	0.021766	0.0	87.3
21.3	$1.8E{+}2$	0.0	0.021566	0.0	87.31
21.4	$1.8E{+}2$	0.0	0.021369	0.0	87.32
21.5	$1.8E{+}2$	0.0	0.021175	0.0	87.34
21.6	$1.8E{+}2$	0.0	0.020984	0.0	87.35
21.7	$1.8E{+}2$	0.0	0.020795	0.0	87.36
21.8	$1.8E{+}2$	0.0	0.020608	0.0	87.37
21.9	$1.8E{+}2$	0.0	0.020424	0.0	87.39
22	$1.8E{+}2$	0.0	0.020243	0.0	87.4
22.1	$1.8E{+}2$	0.0	0.020064	0.0	87.41
22.2	$1.8E{+}2$	0.0	0.019887	0.0	87.42
22.3	$1.8E{+}2$	0.0	0.019713	0.0	87.43
22.4	$1.8E{+}2$	0.0	0.01954	0.0	87.44
22.5	$1.8E{+}2$	0.0	0.01937	0.0	87.46
22.6	$1.8E{+}2$	0.0	0.019203	0.0	87.47
22.7	$1.8E{+}2$	0.0	0.019037	0.0	87.48
22.8	$1.8E{+}2$	0.0	0.018874	0.0	87.49
22.9	$1.8E{+}2$	0.0	0.018712	0.0	87.5
23	$1.8E{+}2$	0.0	0.018553	0.0	87.51
23.1	$1.8E{+}2$	0.0	0.018396	0.0	87.52
23.2	$1.8E{+}2$	0.0	0.01824	0.0	87.53
23.3	$1.8E{+}2$	0.0	0.018087	0.0	87.54
23.4	$1.8E{+}2$	0.0	0.017935	0.0	87.55
23.5	$1.8E{+}2$	0.0	0.017786	0.0	87.56
23.6	$1.8E{+}2$	0.0	0.017638	0.0	87.57
23.7	$1.8E{+}2$	0.0	0.017492	0.0	87.58

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
23.8	$1.8E{+}2$	0.0	0.017348	0.0	87.59
23.9	$1.8E{+}2$	0.0	0.017205	0.0	87.6
24	$1.8E{+}2$	0.0	0.017065	0.0	87.61
24.1	$1.8E{+}2$	0.0	0.016926	0.0	87.62
24.2	$1.8E{+}2$	0.0	0.016789	0.0	87.63
24.3	$1.9E{+}2$	0.0	0.016653	0.0	87.64
24.4	$1.9E{+}2$	0.0	0.016519	0.0	87.65
24.5	$1.9E{+}2$	0.0	0.016387	0.0	87.66
24.6	$1.9E{+}2$	0.0	0.016256	0.0	87.67
24.7	$1.9E{+}2$	0.0	0.016127	0.0	87.68
24.8	$1.9E{+}2$	0.0	0.015999	0.0	87.69
24.9	$1.9E{+}2$	0.0	0.015873	0.0	87.7
25	$1.9E{+}2$	0.0	0.015748	0.0	87.71
25.1	$1.9E{+}2$	0.0	0.015625	0.0	87.72
25.2	$1.9E{+}2$	0.0	0.015503	0.0	87.73
25.3	$1.9E{+}2$	0.0	0.015382	0.0	87.74
25.4	$1.9E{+}2$	0.0	0.015263	0.0	87.75
25.5	$1.9E{+}2$	0.0	0.015146	0.0	87.75
25.6	$1.9E{+}2$	0.0	0.015029	0.0	87.76
25.7	$1.9E{+}2$	0.0	0.014914	0.0	87.77
25.8	$1.9E{+}2$	0.0	0.014801	0.0	87.78
25.9	$1.9E{+}2$	0.0	0.014688	0.0	87.79
26	$1.9E{+}2$	0.0	0.014577	0.0	87.8
26.1	$1.9E{+}2$	0.0	0.014467	0.0	87.81
26.2	$1.9E{+}2$	0.0	0.014359	0.0	87.81
26.3	$1.9E{+}2$	0.0	0.014251	0.0	87.82
26.4	$1.9E{+}2$	0.0	0.014145	0.0	87.83
26.5	$1.9E{+}2$	0.0	0.01404	0.0	87.84
26.6	$1.9E{+}2$	0.0	0.013936	0.0	87.85
26.7	$1.9E{+}2$	0.0	0.013833	0.0	87.86
26.8	$1.9E{+}2$	0.0	0.013732	0.0	87.86
26.9	$1.9E{+}2$	0.0	0.013631	0.0	87.87
27	$1.9E{+}2$	0.0	0.013532	0.0	87.88

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
27.1	1.9E+2	0.0	0.013433	0.0	87.89
27.2	1.9E+2	0.0	0.013336	0.0	87.89
27.3	1.9E+2	0.0	0.01324	0.0	87.9
27.4	1.9E+2	0.0	0.013145	0.0	87.91
27.5	1.9E+2	0.0	0.013051	0.0	87.92
27.6	1.9E+2	0.0	0.012957	0.0	87.92
27.7	1.9E+2	0.0	0.012865	0.0	87.93
27.8	1.9E+2	0.0	0.012774	0.0	87.94
27.9	1.9E+2	0.0	0.012684	0.0	87.95
28	1.9E+2	0.0	0.012594	0.0	87.95
28.1	1.9E+2	0.0	0.012506	0.0	87.96
28.2	1.9E+2	0.0	0.012419	0.0	87.97
28.3	1.9E+2	0.0	0.012332	0.0	87.98
28.4	1.9E+2	0.0	0.012246	0.0	87.98
28.5	1.9E+2	0.0	0.012162	0.0	87.99
28.6	1.9E+2	0.0	0.012078	0.0	88
28.7	1.9E+2	0.0	0.011995	0.0	88
28.8	1.9E+2	0.0	0.011913	0.0	88.01
28.9	1.9E+2	0.0	0.011831	0.0	88.02
29	1.9E+2	0.0	0.011751	0.0	88.03
29.1	1.9E+2	0.0	0.011671	0.0	88.03
29.2	1.9E+2	0.0	0.011592	0.0	88.04
29.3	1.9E+2	0.0	0.011514	0.0	88.05
29.4	1.9E+2	0.0	0.011437	0.0	88.05
29.5	1.9E+2	0.0	0.01136	0.0	88.06
29.6	1.9E+2	0.0	0.011285	0.0	88.07
29.7	1.9E+2	0.0	0.01121	0.0	88.07
29.8	1.9E+2	0.0	0.011135	0.0	88.08
29.9	1.9E+2	0.0	0.011062	0.0	88.08
30	1.9E+2	0.0	0.010989	0.0	88.09
30.1	1.9E+2	0.0	0.010917	0.0	88.1
30.2	1.9E+2	0.0	0.010846	0.0	88.1
30.3	1.9E+2	0.0	0.010775	0.0	88.11

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
30.4	$1.9E+2$	0.0	0.010705	0.0	88.12
30.5	$1.9E+2$	0.0	0.010635	0.0	88.12
30.6	$1.9E+2$	0.0	0.010567	0.0	88.13
30.7	$1.9E+2$	0.0	0.010499	0.0	88.13
30.8	$1.9E+2$	0.0	0.010431	0.0	88.14
30.9	$1.9E+2$	0.0	0.010365	0.0	88.15
31	$1.9E+2$	0.0	0.010299	0.0	88.15
31.1	$1.9E+2$	0.0	0.010233	0.0	88.16
31.2	$1.9E+2$	0.0	0.010168	0.0	88.16
31.3	$1.9E+2$	0.0	0.010104	0.0	88.17
31.4	$1.9E+2$	0.0	0.010041	0.0	88.18
31.5	$1.9E+2$	0.0	0.00998	0.0	88.18
31.6	$1.9E+2$	0.0	0.00992	0.0	88.19
31.7	$1.9E+2$	0.0	0.00985	0.0	88.19
31.8	$1.9E+2$	0.0	0.00979	0.0	88.2
31.9	$1.9E+2$	0.0	0.00973	0.0	88.2
32	$1.9E+2$	0.0	0.00967	0.0	88.21
32.1	$1.9E+2$	0.0	0.00961	0.0	88.22
32.2	$1.9E+2$	0.0	0.00955	0.0	88.22
32.3	$1.9E+2$	0.0	0.00949	0.0	88.23
32.4	$1.9E+2$	0.0	0.00944	0.0	88.23
32.5	$1.9E+2$	0.0	0.00938	0.0	88.24
32.6	$1.9E+2$	0.0	0.00932	0.0	88.24
32.7	$1.9E+2$	0.0	0.00927	0.0	88.25
32.8	$1.9E+2$	0.0	0.00921	0.0	88.25
32.9	$1.9E+2$	0.0	0.00915	0.0	88.26
33	$1.9E+2$	0.0	0.0091	0.0	88.26
33.1	$1.9E+2$	0.0	0.00904	0.0	88.27
33.2	$1.9E+2$	0.0	0.00899	0.0	88.27
33.3	$1.9E+2$	0.0	0.00894	0.0	88.28
33.4	$1.9E+2$	0.0	0.00888	0.0	88.29
33.5	$1.9E+2$	0.0	0.00883	0.0	88.29
33.6	$1.9E+2$	0.0	0.00878	0.0	88.3

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
33.7	$1.9E{+}2$	0.0	0.00873	0.0	88.3
33.8	$1.9E{+}2$	0.0	0.00868	0.0	88.31
33.9	$1.9E{+}2$	0.0	0.00863	0.0	88.31
34	$1.9E{+}2$	0.0	0.00858	0.0	88.32
34.1	$1.9E{+}2$	0.0	0.00853	0.0	88.32
34.2	$1.9E{+}2$	0.0	0.00848	0.0	88.33
34.3	$1.9E{+}2$	0.0	0.00843	0.0	88.33
34.4	$1.9E{+}2$	0.0	0.00838	0.0	88.33
34.5	$1.9E{+}2$	0.0	0.00833	0.0	88.34
34.6	$1.9E{+}2$	0.0	0.00828	0.0	88.34
34.7	$1.9E{+}2$	0.0	0.00824	0.0	88.35
34.8	$1.9E{+}2$	0.0	0.00819	0.0	88.35
34.9	$1.9E{+}2$	0.0	0.00814	0.0	88.36
35	$1.9E{+}2$	0.0	0.0081	0.0	88.36
35.1	$1.9E{+}2$	0.0	0.00805	0.0	88.37
35.2	$1.9E{+}2$	0.0	0.00801	0.0	88.37
35.3	$1.9E{+}2$	0.0	0.00796	0.0	88.38
35.4	$1.9E{+}2$	0.0	0.00792	0.0	88.38
35.5	$1.9E{+}2$	0.0	0.00787	0.0	88.39
35.6	$1.9E{+}2$	0.0	0.00783	0.0	88.39
35.7	$1.9E{+}2$	0.0	0.00779	0.0	88.4
35.8	$1.9E{+}2$	0.0	0.00774	0.0	88.4
35.9	$1.9E{+}2$	0.0	0.0077	0.0	88.4
36	$1.9E{+}2$	0.0	0.00766	0.0	88.41
36.1	$1.9E{+}2$	0.0	0.00761	0.0	88.41
36.2	$1.9E{+}2$	0.0	0.00757	0.0	88.42
36.3	$1.9E{+}2$	0.0	0.00753	0.0	88.42
36.4	$1.9E{+}2$	0.0	0.00749	0.0	88.43
36.5	$1.9E{+}2$	0.0	0.00745	0.0	88.43
36.6	$1.9E{+}2$	0.0	0.00741	0.0	88.43
36.7	$1.9E{+}2$	0.0	0.00737	0.0	88.44
36.8	$1.9E{+}2$	0.0	0.00733	0.0	88.44
36.9	$1.9E{+}2$	0.0	0.00729	0.0	88.45

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
37	$1.9E{+}2$	0.0	0.00725	0.0	88.45
37.1	$1.9E{+}2$	0.0	0.00721	0.0	88.46
37.2	$1.9E{+}2$	0.0	0.00717	0.0	88.46
37.3	$1.9E{+}2$	0.0	0.00714	0.0	88.46
37.4	$1.9E{+}2$	0.0	0.0071	0.0	88.47
37.5	$1.9E{+}2$	0.0	0.00706	0.0	88.47
37.6	$1.9E{+}2$	0.0	0.00702	0.0	88.48
37.7	$1.9E{+}2$	0.0	0.00699	0.0	88.48
37.8	$1.9E{+}2$	0.0	0.00695	0.0	88.48
37.9	$1.9E{+}2$	0.0	0.00691	0.0	88.49
38	$1.9E{+}2$	0.0	0.00688	0.0	88.49
38.1	$1.9E{+}2$	0.0	0.00684	0.0	88.5
38.2	$1.9E{+}2$	0.0	0.00681	0.0	88.5
38.3	$1.9E{+}2$	0.0	0.00677	0.0	88.5
38.4	$1.9E{+}2$	0.0	0.00674	0.0	88.51
38.5	$1.9E{+}2$	0.0	0.0067	0.0	88.51
38.6	$1.9E{+}2$	0.0	0.00667	0.0	88.52
38.7	$1.9E{+}2$	0.0	0.00663	0.0	88.52
38.8	$1.9E{+}2$	0.0	0.0066	0.0	88.52
38.9	$1.9E{+}2$	0.0	0.00657	0.0	88.53
39	$1.9E{+}2$	0.0	0.00653	0.0	88.53
39.1	$1.9E{+}2$	0.0	0.0065	0.0	88.53
39.2	$1.9E{+}2$	0.0	0.00647	0.0	88.54
39.3	$1.9E{+}2$	0.0	0.00643	0.0	88.54
39.4	$1.9E{+}2$	0.0	0.0064	0.0	88.55
39.5	$1.9E{+}2$	0.0	0.00637	0.0	88.55
39.6	$1.9E{+}2$	0.0	0.00634	0.0	88.55
39.7	$1.9E{+}2$	0.0	0.0063	0.0	88.56
39.8	$1.9E{+}2$	0.0	0.00627	0.0	88.56
39.9	$1.9E{+}2$	0.0	0.00624	0.0	88.56
40	$1.9E{+}2$	0.0	0.00621	0.0	88.57
40.1	$1.9E{+}2$	0.0	0.00618	0.0	88.57
40.2	$1.9E{+}2$	0.0	0.00615	0.0	88.58

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
40.3	$1.9E{+}2$	0.0	0.00612	0.0	88.58
40.4	$1.9E{+}2$	0.0	0.00609	0.0	88.58
40.5	$1.9E{+}2$	0.0	0.00606	0.0	88.59
40.6	$1.9E{+}2$	0.0	0.00603	0.0	88.59
40.7	$1.9E{+}2$	0.0	0.006	0.0	88.59
40.8	$1.9E{+}2$	0.0	0.00597	0.0	88.6
40.9	$1.9E{+}2$	0.0	0.00594	0.0	88.6
41	$1.9E{+}2$	0.0	0.00591	0.0	88.6
41.1	$1.9E{+}2$	0.0	0.00589	0.0	88.61
41.2	$1.9E{+}2$	0.0	0.00586	0.0	88.61
41.3	$1.9E{+}2$	0.0	0.00583	0.0	88.61
41.4	$1.9E{+}2$	0.0	0.0058	0.0	88.62
41.5	$1.9E{+}2$	0.0	0.00577	0.0	88.62
41.6	$1.9E{+}2$	0.0	0.00575	0.0	88.62
41.7	$1.9E{+}2$	0.0	0.00572	0.0	88.63
41.8	$1.9E{+}2$	0.0	0.00569	0.0	88.63
41.9	$1.9E{+}2$	0.0	0.00566	0.0	88.63
42	$1.9E{+}2$	0.0	0.00564	0.0	88.64
42.1	$1.9E{+}2$	0.0	0.00561	0.0	88.64
42.2	$1.9E{+}2$	0.0	0.00558	0.0	88.64
42.3	$1.9E{+}2$	0.0	0.00556	0.0	88.65
42.4	$2.0E{+}2$	0.0	0.00553	0.0	88.65
42.5	$2.0E{+}2$	0.0	0.00551	0.0	88.65
42.6	$2.0E{+}2$	0.0	0.00548	0.0	88.66
42.7	$2.0E{+}2$	0.0	0.00545	0.0	88.66
42.8	$2.0E{+}2$	0.0	0.00543	0.0	88.66
42.9	$2.0E{+}2$	0.0	0.0054	0.0	88.66
43	$2.0E{+}2$	0.0	0.00538	0.0	88.67
43.1	$2.0E{+}2$	0.0	0.00535	0.0	88.67
43.2	$2.0E{+}2$	0.0	0.00533	0.0	88.67
43.3	$2.0E{+}2$	0.0	0.00531	0.0	88.68
43.4	$2.0E{+}2$	0.0	0.00528	0.0	88.68
43.5	$2.0E{+}2$	0.0	0.00526	0.0	88.68

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
43.6	$2.0E{+}2$	0.0	0.00523	0.0	88.69
43.7	$2.0E{+}2$	0.0	0.00521	0.0	88.69
43.8	$2.0E{+}2$	0.0	0.00519	0.0	88.69
43.9	$2.0E{+}2$	0.0	0.00516	0.0	88.7
44	$2.0E{+}2$	0.0	0.00514	0.0	88.7
44.1	$2.0E{+}2$	0.0	0.00512	0.0	88.7
44.2	$2.0E{+}2$	0.0	0.00509	0.0	88.7
44.3	$2.0E{+}2$	0.0	0.00507	0.0	88.71
44.4	$2.0E{+}2$	0.0	0.00505	0.0	88.71
44.5	$2.0E{+}2$	0.0	0.00502	0.0	88.71
44.6	$2.0E{+}2$	0.0	0.005	0.0	88.72
44.7	$2.0E{+}2$	0.0	0.00498	0.0	88.72
44.8	$2.0E{+}2$	0.0	0.00496	0.0	88.72
44.9	$2.0E{+}2$	0.0	0.00494	0.0	88.72
45	$2.0E{+}2$	0.0	0.00491	0.0	88.73
45.1	$2.0E{+}2$	0.0	0.00489	0.0	88.73
45.2	$2.0E{+}2$	0.0	0.00487	0.0	88.73
45.3	$2.0E{+}2$	0.0	0.00485	0.0	88.74
45.4	$2.0E{+}2$	0.0	0.00483	0.0	88.74
45.5	$2.0E{+}2$	0.0	0.00481	0.0	88.74
45.6	$2.0E{+}2$	0.0	0.00479	0.0	88.74
45.7	$2.0E{+}2$	0.0	0.00477	0.0	88.75
45.8	$2.0E{+}2$	0.0	0.00474	0.0	88.75
45.9	$2.0E{+}2$	0.0	0.00472	0.0	88.75
46	$2.0E{+}2$	0.0	0.0047	0.0	88.75
46.1	$2.0E{+}2$	0.0	0.00468	0.0	88.76
46.2	$2.0E{+}2$	0.0	0.00466	0.0	88.76
46.3	$2.0E{+}2$	0.0	0.00464	0.0	88.76
46.4	$2.0E{+}2$	0.0	0.00462	0.0	88.77
46.5	$2.0E{+}2$	0.0	0.0046	0.0	88.77
46.6	$2.0E{+}2$	0.0	0.00458	0.0	88.77
46.7	$2.0E{+}2$	0.0	0.00456	0.0	88.77
46.8	$2.0E{+}2$	0.0	0.00454	0.0	88.78

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
46.9	2.0E+2	0.0	0.00453	0.0	88.78
47	2.0E+2	0.0	0.00451	0.0	88.78
47.1	2.0E+2	0.0	0.00449	0.0	88.78
47.2	2.0E+2	0.0	0.00447	0.0	88.79
47.3	2.0E+2	0.0	0.00445	0.0	88.79
47.4	2.0E+2	0.0	0.00443	0.0	88.79
47.5	2.0E+2	0.0	0.00441	0.0	88.79
47.6	2.0E+2	0.0	0.00439	0.0	88.8
47.7	2.0E+2	0.0	0.00438	0.0	88.8
47.8	2.0E+2	0.0	0.00436	0.0	88.8
47.9	2.0E+2	0.0	0.00434	0.0	88.8
48	2.0E+2	0.0	0.00432	0.0	88.81
48.1	2.0E+2	0.0	0.0043	0.0	88.81
48.2	2.0E+2	0.0	0.00429	0.0	88.81
48.3	2.0E+2	0.0	0.00427	0.0	88.81
48.4	2.0E+2	0.0	0.00425	0.0	88.82
48.5	2.0E+2	0.0	0.00423	0.0	88.82
48.6	2.0E+2	0.0	0.00422	0.0	88.82
48.7	2.0E+2	0.0	0.0042	0.0	88.82
48.8	2.0E+2	0.0	0.00418	0.0	88.83
48.9	2.0E+2	0.0	0.00416	0.0	88.83
49	2.0E+2	0.0	0.00415	0.0	88.83
49.1	2.0E+2	0.0	0.00413	0.0	88.83
49.2	2.0E+2	0.0	0.00411	0.0	88.84
49.3	2.0E+2	0.0	0.0041	0.0	88.84
49.4	2.0E+2	0.0	0.00408	0.0	88.84
49.5	2.0E+2	0.0	0.00406	0.0	88.84
49.6	2.0E+2	0.0	0.00405	0.0	88.84
49.7	2.0E+2	0.0	0.00403	0.0	88.85
49.8	2.0E+2	0.0	0.00402	0.0	88.85
49.9	2.0E+2	0.0	0.004	0.0	88.85
50	2.0E+2	0.0	0.00398	0.0	88.85
50.1	2.0E+2	0.0	0.00397	0.0	88.86

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
50.2	2.0E+2	0.0	0.00395	0.0	88.86
50.3	2.0E+2	0.0	0.00394	0.0	88.86
50.4	2.0E+2	0.0	0.00392	0.0	88.86
50.5	2.0E+2	0.0	0.00391	0.0	88.87
50.6	2.0E+2	0.0	0.00389	0.0	88.87
50.7	2.0E+2	0.0	0.00388	0.0	88.87
50.8	2.0E+2	0.0	0.00386	0.0	88.87
50.9	2.0E+2	0.0	0.00384	0.0	88.87
51	2.0E+2	0.0	0.00383	0.0	88.88
51.1	2.0E+2	0.0	0.00382	0.0	88.88
51.2	2.0E+2	0.0	0.0038	0.0	88.88
51.3	2.0E+2	0.0	0.00379	0.0	88.88
51.4	2.0E+2	0.0	0.00377	0.0	88.89
51.5	2.0E+2	0.0	0.00376	0.0	88.89
51.6	2.0E+2	0.0	0.00374	0.0	88.89
51.7	2.0E+2	0.0	0.00373	0.0	88.89
51.8	2.0E+2	0.0	0.00371	0.0	88.89
51.9	2.0E+2	0.0	0.0037	0.0	88.9
52	2.0E+2	0.0	0.00368	0.0	88.9
52.1	2.0E+2	0.0	0.00367	0.0	88.9
52.2	2.0E+2	0.0	0.00366	0.0	88.9
52.3	2.0E+2	0.0	0.00364	0.0	88.9
52.4	2.0E+2	0.0	0.00363	0.0	88.91
52.5	2.0E+2	0.0	0.00362	0.0	88.91
52.6	2.0E+2	0.0	0.0036	0.0	88.91
52.7	2.0E+2	0.0	0.00359	0.0	88.91
52.8	2.0E+2	0.0	0.00357	0.0	88.91
52.9	2.0E+2	0.0	0.00356	0.0	88.92
53	2.0E+2	0.0	0.00355	0.0	88.92
53.1	2.0E+2	0.0	0.00353	0.0	88.92
53.2	2.0E+2	0.0	0.00352	0.0	88.92
53.3	2.0E+2	0.0	0.00351	0.0	88.93
53.4	2.0E+2	0.0	0.00349	0.0	88.93

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
53.5	2.0E+2	0.0	0.00348	0.0	88.93
53.6	2.0E+2	0.0	0.00347	0.0	88.93
53.7	2.0E+2	0.0	0.00346	0.0	88.93
53.8	2.0E+2	0.0	0.00344	0.0	88.94
53.9	2.0E+2	0.0	0.00343	0.0	88.94
54	2.0E+2	0.0	0.00342	0.0	88.94
54.1	2.0E+2	0.0	0.00341	0.0	88.94
54.2	2.0E+2	0.0	0.00339	0.0	88.94
54.3	2.0E+2	0.0	0.00338	0.0	88.94
54.4	2.0E+2	0.0	0.00337	0.0	88.95
54.5	2.0E+2	0.0	0.00336	0.0	88.95
54.6	2.0E+2	0.0	0.00334	0.0	88.95
54.7	2.0E+2	0.0	0.00333	0.0	88.95
54.8	2.0E+2	0.0	0.00332	0.0	88.95
54.9	2.0E+2	0.0	0.00331	0.0	88.96
55	2.0E+2	0.0	0.00329	0.0	88.96
55.1	2.0E+2	0.0	0.00328	0.0	88.96
55.2	2.0E+2	0.0	0.00327	0.0	88.96
55.3	2.0E+2	0.0	0.00326	0.0	88.96
55.4	2.0E+2	0.0	0.00325	0.0	88.97
55.5	2.0E+2	0.0	0.00324	0.0	88.97
55.6	2.0E+2	0.0	0.00322	0.0	88.97
55.7	2.0E+2	0.0	0.00321	0.0	88.97
55.8	2.0E+2	0.0	0.0032	0.0	88.97
55.9	2.0E+2	0.0	0.00319	0.0	88.98
56	2.0E+2	0.0	0.00318	0.0	88.98
56.1	2.0E+2	0.0	0.00317	0.0	88.98
56.2	2.0E+2	0.0	0.00316	0.0	88.98
56.3	2.0E+2	0.0	0.00314	0.0	88.98
56.4	2.0E+2	0.0	0.00313	0.0	88.98
56.5	2.0E+2	0.0	0.00312	0.0	88.99
56.6	2.0E+2	0.0	0.00311	0.0	88.99
56.7	2.0E+2	0.0	0.0031	0.0	88.99

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
56.8	2.0E+2	0.0	0.00309	0.0	88.99
56.9	2.0E+2	0.0	0.00308	0.0	88.99
57	2.0E+2	0.0	0.00307	0.0	88.99
57.1	2.0E+2	0.0	0.00306	0.0	89
57.2	2.0E+2	0.0	0.00305	0.0	89
57.3	2.0E+2	0.0	0.00304	0.0	89
57.4	2.0E+2	0.0	0.00303	0.0	89
57.5	2.0E+2	0.0	0.00302	0.0	89
57.6	2.0E+2	0.0	0.00301	0.0	89.01
57.7	2.0E+2	0.0	0.00299	0.0	89.01
57.8	2.0E+2	0.0	0.00298	0.0	89.01
57.9	2.0E+2	0.0	0.00297	0.0	89.01
58	2.0E+2	0.0	0.00296	0.0	89.01
58.1	2.0E+2	0.0	0.00295	0.0	89.01
58.2	2.0E+2	0.0	0.00294	0.0	89.02
58.3	2.0E+2	0.0	0.00293	0.0	89.02
58.4	2.0E+2	0.0	0.00292	0.0	89.02
58.5	2.0E+2	0.0	0.00291	0.0	89.02
58.6	2.0E+2	0.0	0.0029	0.0	89.02
58.7	2.0E+2	0.0	0.00289	0.0	89.02
58.8	2.0E+2	0.0	0.00288	0.0	89.03
58.9	2.0E+2	0.0	0.00287	0.0	89.03
59	2.0E+2	0.0	0.00286	0.0	89.03
59.1	2.0E+2	0.0	0.00285	0.0	89.03
59.2	2.0E+2	0.0	0.00285	0.0	89.03
59.3	2.0E+2	0.0	0.00284	0.0	89.03
59.4	2.0E+2	0.0	0.00283	0.0	89.04
59.5	2.0E+2	0.0	0.00282	0.0	89.04
59.6	2.0E+2	0.0	0.00281	0.0	89.04
59.7	2.0E+2	0.0	0.0028	0.0	89.04
59.8	2.0E+2	0.0	0.00279	0.0	89.04
59.9	2.0E+2	0.0	0.00278	0.0	89.04
60	2.0E+2	0.0	0.00277	0.0	89.05

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
60.1	$2.0E{+}2$	0.0	0.00276	0.0	89.05
60.2	$2.0E{+}2$	0.0	0.00275	0.0	89.05
60.3	$2.0E{+}2$	0.0	0.00274	0.0	89.05
60.4	$2.0E{+}2$	0.0	0.00273	0.0	89.05
60.5	$2.0E{+}2$	0.0	0.00272	0.0	89.05
60.6	$2.0E{+}2$	0.0	0.00272	0.0	89.05
60.7	$2.0E{+}2$	0.0	0.00271	0.0	89.06
60.8	$2.0E{+}2$	0.0	0.0027	0.0	89.06
60.9	$2.0E{+}2$	0.0	0.00269	0.0	89.06
61	$2.0E{+}2$	0.0	0.00268	0.0	89.06
61.1	$2.0E{+}2$	0.0	0.00267	0.0	89.06
61.2	$2.0E{+}2$	0.0	0.00266	0.0	89.06
61.3	$2.0E{+}2$	0.0	0.00265	0.0	89.07
61.4	$2.0E{+}2$	0.0	0.00265	0.0	89.07
61.5	$2.0E{+}2$	0.0	0.00264	0.0	89.07
61.6	$2.0E{+}2$	0.0	0.00263	0.0	89.07
61.7	$2.0E{+}2$	0.0	0.00262	0.0	89.07
61.8	$2.0E{+}2$	0.0	0.00261	0.0	89.07
61.9	$2.0E{+}2$	0.0	0.0026	0.0	89.07
62	$2.0E{+}2$	0.0	0.00259	0.0	89.08
62.1	$2.0E{+}2$	0.0	0.00259	0.0	89.08
62.2	$2.0E{+}2$	0.0	0.00258	0.0	89.08
62.3	$2.0E{+}2$	0.0	0.00257	0.0	89.08
62.4	$2.0E{+}2$	0.0	0.00256	0.0	89.08
62.5	$2.0E{+}2$	0.0	0.00255	0.0	89.08
62.6	$2.0E{+}2$	0.0	0.00255	0.0	89.08
62.7	$2.0E{+}2$	0.0	0.00254	0.0	89.09
62.8	$2.0E{+}2$	0.0	0.00253	0.0	89.09
62.9	$2.0E{+}2$	0.0	0.00252	0.0	89.09
63	$2.0E{+}2$	0.0	0.00251	0.0	89.09
63.1	$2.0E{+}2$	0.0	0.00251	0.0	89.09
63.2	$2.0E{+}2$	0.0	0.0025	0.0	89.09
63.3	$2.0E{+}2$	0.0	0.00249	0.0	89.09

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
63.4	2.0E+2	0.0	0.00248	0.0	89.1
63.5	2.0E+2	0.0	0.00247	0.0	89.1
63.6	2.0E+2	0.0	0.00247	0.0	89.1
63.7	2.0E+2	0.0	0.00246	0.0	89.1
63.8	2.0E+2	0.0	0.00245	0.0	89.1
63.9	2.0E+2	0.0	0.00244	0.0	89.1
64	2.0E+2	0.0	0.00244	0.0	89.1
64.1	2.0E+2	0.0	0.00243	0.0	89.11
64.2	2.0E+2	0.0	0.00242	0.0	89.11
64.3	2.0E+2	0.0	0.00241	0.0	89.11
64.4	2.0E+2	0.0	0.00241	0.0	89.11
64.5	2.0E+2	0.0	0.0024	0.0	89.11
64.6	2.0E+2	0.0	0.00239	0.0	89.11
64.7	2.0E+2	0.0	0.00238	0.0	89.11
64.8	2.0E+2	0.0	0.00238	0.0	89.12
64.9	2.0E+2	0.0	0.00237	0.0	89.12
65	2.0E+2	0.0	0.00236	0.0	89.12
65.1	2.0E+2	0.0	0.00235	0.0	89.12
65.2	2.0E+2	0.0	0.00235	0.0	89.12
65.3	2.0E+2	0.0	0.00234	0.0	89.12
65.4	2.0E+2	0.0	0.00233	0.0	89.12
65.5	2.0E+2	0.0	0.00233	0.0	89.13
65.6	2.0E+2	0.0	0.00232	0.0	89.13
65.7	2.0E+2	0.0	0.00231	0.0	89.13
65.8	2.0E+2	0.0	0.0023	0.0	89.13
65.9	2.0E+2	0.0	0.0023	0.0	89.13
66	2.0E+2	0.0	0.00229	0.0	89.13
66.1	2.0E+2	0.0	0.00228	0.0	89.13
66.2	2.0E+2	0.0	0.00228	0.0	89.13
66.3	2.0E+2	0.0	0.00227	0.0	89.14
66.4	2.0E+2	0.0	0.00226	0.0	89.14
66.5	2.0E+2	0.0	0.00226	0.0	89.14
66.6	2.0E+2	0.0	0.00225	0.0	89.14

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
66.7	$2.0E{+}2$	0.0	0.00224	0.0	89.14
66.8	$2.0E{+}2$	0.0	0.00224	0.0	89.14
66.9	$2.0E{+}2$	0.0	0.00223	0.0	89.14
67	$2.0E{+}2$	0.0	0.00222	0.0	89.14
67.1	$2.0E{+}2$	0.0	0.00222	0.0	89.15
67.2	$2.0E{+}2$	0.0	0.00221	0.0	89.15
67.3	$2.0E{+}2$	0.0	0.0022	0.0	89.15
67.4	$2.0E{+}2$	0.0	0.0022	0.0	89.15
67.5	$2.0E{+}2$	0.0	0.00219	0.0	89.15
67.6	$2.0E{+}2$	0.0	0.00218	0.0	89.15
67.7	$2.0E{+}2$	0.0	0.00218	0.0	89.15
67.8	$2.0E{+}2$	0.0	0.00217	0.0	89.15
67.9	$2.0E{+}2$	0.0	0.00216	0.0	89.16
68	$2.0E{+}2$	0.0	0.00216	0.0	89.16
68.1	$2.0E{+}2$	0.0	0.00215	0.0	89.16
68.2	$2.0E{+}2$	0.0	0.00215	0.0	89.16
68.3	$2.0E{+}2$	0.0	0.00214	0.0	89.16
68.4	$2.0E{+}2$	0.0	0.00213	0.0	89.16
68.5	$2.0E{+}2$	0.0	0.00213	0.0	89.16
68.6	$2.0E{+}2$	0.0	0.00212	0.0	89.16
68.7	$2.0E{+}2$	0.0	0.00211	0.0	89.17
68.8	$2.0E{+}2$	0.0	0.00211	0.0	89.17
68.9	$2.0E{+}2$	0.0	0.0021	0.0	89.17
69	$2.0E{+}2$	0.0	0.0021	0.0	89.17
69.1	$2.0E{+}2$	0.0	0.00209	0.0	89.17
69.2	$2.0E{+}2$	0.0	0.00208	0.0	89.17
69.3	$2.0E{+}2$	0.0	0.00208	0.0	89.17
69.4	$2.0E{+}2$	0.0	0.00207	0.0	89.17
69.5	$2.0E{+}2$	0.0	0.00207	0.0	89.18
69.6	$2.0E{+}2$	0.0	0.00206	0.0	89.18
69.7	$2.0E{+}2$	0.0	0.00205	0.0	89.18
69.8	$2.0E{+}2$	0.0	0.00205	0.0	89.18
69.9	$2.0E{+}2$	0.0	0.00204	0.0	89.18

Table 7.1: Prandtl–Meyer function for k=1.2 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
70	$2.0E{+}2$	0.0	0.00204	0.0	89.18

7.2 Prandtl-Meyer Function for k=1.3

Table 7.2: Prandtl-Meyer function for k=1.3

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
1.0	0.0	0.54573	0.86957	0.62759	45
1.01	0.04669	0.53957	0.86729	0.62213	45.29
1.02	0.13127	0.53344	0.86501	0.61669	45.57
1.03	0.23972	0.52733	0.86271	0.61125	45.85
1.04	0.36688	0.52126	0.86041	0.60583	46.12
1.05	0.50971	0.51521	0.85809	0.60041	46.4
1.06	0.66611	0.50919	0.85577	0.59501	46.67
1.07	0.8345	0.5032	0.85344	0.58962	46.94
1.08	1.014	0.49724	0.85109	0.58424	47.2
1.09	1.203	0.49132	0.84874	0.57888	47.47
1.1	1.4	0.48542	0.84638	0.57353	47.73
1.11	1.606	0.47957	0.84401	0.5682	47.98
1.12	1.82	0.47374	0.84164	0.56288	48.24
1.13	2.041	0.46795	0.83925	0.55758	48.49
1.14	2.268	0.4622	0.83686	0.55231	48.74
1.15	2.501	0.45649	0.83446	0.54705	48.99
1.16	2.74	0.45081	0.83206	0.54181	49.24
1.17	2.984	0.44518	0.82964	0.53659	49.48
1.18	3.233	0.43958	0.82723	0.53139	49.72
1.19	3.487	0.43402	0.8248	0.52621	49.96
1.2	3.745	0.4285	0.82237	0.52106	50.19
1.21	4.008	0.42303	0.81993	0.51593	50.43
1.22	4.274	0.41759	0.81749	0.51082	50.66
1.23	4.544	0.4122	0.81504	0.50574	50.89
1.24	4.818	0.40685	0.81259	0.50068	51.12

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
1.25	5.095	0.40154	0.81013	0.49565	51.34
1.26	5.375	0.39628	0.80766	0.49065	51.56
1.27	5.658	0.39106	0.8052	0.48567	51.78
1.28	5.944	0.38588	0.80272	0.48071	52
1.29	6.232	0.38075	0.80025	0.47579	52.22
1.3	6.523	0.37566	0.79777	0.47089	52.43
1.31	6.816	0.37062	0.79528	0.46602	52.64
1.32	7.112	0.36562	0.7928	0.46118	52.85
1.33	7.409	0.36067	0.7903	0.45637	53.06
1.34	7.709	0.35576	0.78781	0.45159	53.27
1.35	8.01	0.3509	0.78531	0.44683	53.47
1.36	8.313	0.34609	0.78282	0.44211	53.67
1.37	8.618	0.34132	0.78031	0.43742	53.87
1.38	8.924	0.3366	0.77781	0.43276	54.07
1.39	9.232	0.33193	0.7753	0.42813	54.27
1.4	9.541	0.3273	0.7728	0.42353	54.46
1.41	9.852	0.32272	0.77029	0.41897	54.65
1.42	10.16	0.31819	0.76778	0.41443	54.85
1.43	10.48	0.3137	0.76527	0.40993	55.03
1.44	10.79	0.30927	0.76275	0.40546	55.22
1.45	11.11	0.30487	0.76024	0.40102	55.41
1.46	11.42	0.30053	0.75773	0.39662	55.59
1.47	11.74	0.29623	0.75521	0.39225	55.77
1.48	12.06	0.29198	0.75269	0.38791	55.95
1.49	12.37	0.28777	0.75018	0.3836	56.13
1.5	12.69	0.28361	0.74766	0.37933	56.31
1.51	13.01	0.2795	0.74515	0.3751	56.49
1.52	13.33	0.27544	0.74263	0.37089	56.66
1.53	13.65	0.27142	0.74012	0.36672	56.83
1.54	13.97	0.26745	0.7376	0.36259	57
1.55	14.3	0.26352	0.73509	0.35849	57.17
1.56	14.62	0.25964	0.73258	0.35442	57.34
1.57	14.94	0.2558	0.73007	0.35038	57.51

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
1.58	15.26	0.25202	0.72756	0.34639	57.67
1.59	15.59	0.24827	0.72505	0.34242	57.83
1.6	15.91	0.24457	0.72254	0.33849	57.99
1.61	16.23	0.24092	0.72004	0.33459	58.15
1.62	16.56	0.23731	0.71754	0.33073	58.31
1.63	16.88	0.23375	0.71503	0.32691	58.47
1.64	17.2	0.23023	0.71253	0.32311	58.63
1.65	17.53	0.22675	0.71004	0.31935	58.78
1.66	17.85	0.22332	0.70754	0.31563	58.93
1.67	18.17	0.21993	0.70505	0.31194	59.09
1.68	18.5	0.21659	0.70256	0.30828	59.24
1.69	18.82	0.21329	0.70008	0.30466	59.39
1.7	19.14	0.21003	0.69759	0.30107	59.53
1.71	19.47	0.20681	0.69511	0.29752	59.68
1.72	19.79	0.20364	0.69264	0.294	59.83
1.73	20.11	0.2005	0.69016	0.29052	59.97
1.74	20.44	0.19741	0.68769	0.28706	60.11
1.75	20.76	0.19436	0.68522	0.28365	60.26
1.76	21.08	0.19135	0.68276	0.28026	60.4
1.77	21.4	0.18838	0.6803	0.27691	60.53
1.78	21.72	0.18545	0.67785	0.27359	60.67
1.79	22.04	0.18256	0.6754	0.27031	60.81
1.8	22.36	0.17972	0.67295	0.26706	60.95
1.81	22.68	0.1769	0.6705	0.26384	61.08
1.82	23	0.17413	0.66807	0.26065	61.21
1.83	23.32	0.1714	0.66563	0.2575	61.35
1.84	23.64	0.1687	0.6632	0.25438	61.48
1.85	23.96	0.16605	0.66077	0.25129	61.61
1.86	24.28	0.16343	0.65835	0.24824	61.74
1.87	24.6	0.16084	0.65594	0.24521	61.86
1.88	24.92	0.1583	0.65353	0.24222	61.99
1.89	25.23	0.15579	0.65112	0.23926	62.12
1.9	25.55	0.15331	0.64872	0.23633	62.24

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
1.91	25.86	0.15087	0.64632	0.23343	62.37
1.92	26.18	0.14847	0.64393	0.23057	62.49
1.93	26.49	0.1461	0.64155	0.22773	62.61
1.94	26.81	0.14377	0.63917	0.22493	62.73
1.95	27.12	0.14147	0.63679	0.22215	62.85
1.96	27.44	0.1392	0.63442	0.21941	62.97
1.97	27.75	0.13697	0.63206	0.2167	63.09
1.98	28.06	0.13476	0.6297	0.21401	63.2
1.99	28.37	0.1326	0.62735	0.21136	63.32
2	28.68	0.13046	0.625	0.20874	63.43
2.02	29.3	0.12628	0.62032	0.20358	63.66
2.04	29.92	0.12223	0.61567	0.19853	63.89
2.06	30.53	0.1183	0.61105	0.1936	64.11
2.08	31.14	0.11449	0.60644	0.18878	64.32
2.1	31.75	0.11079	0.60187	0.18408	64.54
2.12	32.35	0.1072	0.59731	0.17948	64.75
2.14	32.96	0.10373	0.59279	0.17499	64.95
2.16	33.55	0.10036	0.58829	0.1706	65.16
2.18	34.15	0.097097	0.58382	0.16631	65.36
2.2	34.74	0.093934	0.57937	0.16213	65.56
2.22	35.33	0.09087	0.57496	0.15805	65.75
2.24	35.92	0.087902	0.57057	0.15406	65.94
2.26	36.5	0.085027	0.56621	0.15017	66.13
2.28	37.08	0.082243	0.56187	0.14637	66.32
2.3	37.66	0.079548	0.55757	0.14267	66.5
2.32	38.23	0.076938	0.55329	0.13905	66.68
2.34	38.8	0.074411	0.54905	0.13553	66.86
2.36	39.37	0.071966	0.54483	0.13209	67.04
2.38	39.94	0.069599	0.54064	0.12873	67.21
2.4	40.5	0.067308	0.53648	0.12546	67.38
2.42	41.05	0.065092	0.53235	0.12227	67.55
2.44	41.61	0.062947	0.52825	0.11916	67.71
2.46	42.16	0.060872	0.52418	0.11613	67.88

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
2.48	42.7	0.058865	0.52014	0.11317	68.04
2.5	43.25	0.056923	0.51613	0.11029	68.2
2.52	43.79	0.055045	0.51215	0.10748	68.36
2.54	44.33	0.053228	0.5082	0.10474	68.51
2.56	44.86	0.051471	0.50428	0.10207	68.66
2.58	45.39	0.049772	0.50039	0.099468	68.81
2.6	45.92	0.048129	0.49652	0.096932	68.96
2.62	46.44	0.046541	0.49269	0.094462	69.11
2.64	46.96	0.045005	0.48889	0.092054	69.25
2.66	47.48	0.04352	0.48512	0.089709	69.4
2.68	47.99	0.042084	0.48138	0.087423	69.54
2.7	48.5	0.040696	0.47767	0.085197	69.68
2.72	49.01	0.039354	0.47399	0.083028	69.81
2.74	49.51	0.038057	0.47034	0.080915	69.95
2.76	50.01	0.036803	0.46671	0.078856	70.08
2.78	50.51	0.035591	0.46312	0.076851	70.22
2.8	51	0.03442	0.45956	0.074898	70.35
2.82	51.49	0.033288	0.45603	0.072996	70.47
2.84	51.98	0.032194	0.45252	0.071143	70.6
2.86	52.46	0.031136	0.44905	0.069338	70.73
2.88	52.94	0.030114	0.4456	0.06758	70.85
2.9	53.42	0.029126	0.44218	0.065869	70.97
2.92	53.89	0.028171	0.4388	0.064201	71.1
2.94	54.37	0.027249	0.43544	0.062578	71.21
2.96	54.83	0.026357	0.43211	0.060997	71.33
2.98	55.3	0.025495	0.42881	0.059457	71.45
3	55.76	0.024663	0.42553	0.057957	71.57
3.02	56.22	0.023858	0.42229	0.056497	71.68
3.04	56.67	0.02308	0.41907	0.055075	71.79
3.06	57.12	0.022329	0.41588	0.05369	71.9
3.08	57.57	0.021602	0.41272	0.052341	72.01
3.1	58.02	0.0209	0.40958	0.051028	72.12
3.12	58.46	0.020222	0.40648	0.04975	72.23

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
3.14	58.9	0.019567	0.4034	0.048504	72.33
3.16	59.34	0.018933	0.40035	0.047292	72.44
3.18	59.77	0.018321	0.39732	0.046111	72.54
3.2	60.2	0.017729	0.39432	0.044961	72.65
3.22	60.63	0.017157	0.39135	0.043841	72.75
3.24	61.05	0.016605	0.3884	0.042751	72.85
3.26	61.48	0.01607	0.38548	0.041689	72.95
3.28	61.9	0.015554	0.38259	0.040655	73.04
3.3	62.31	0.015055	0.37972	0.039648	73.14
3.32	62.72	0.014573	0.37688	0.038667	73.24
3.34	63.13	0.014107	0.37406	0.037713	73.33
3.36	63.54	0.013656	0.37127	0.036783	73.43
3.38	63.95	0.013221	0.36851	0.035877	73.52
3.4	64.35	0.0128	0.36576	0.034995	73.61
3.42	64.75	0.012393	0.36305	0.034136	73.7
3.44	65.14	0.012	0.36036	0.033299	73.79
3.46	65.54	0.011619	0.35769	0.032485	73.88
3.48	65.93	0.011252	0.35504	0.031691	73.97
3.5	66.32	0.010896	0.35242	0.030918	74.05
3.52	66.7	0.010553	0.34983	0.030165	74.14
3.54	67.09	0.01022	0.34725	0.029432	74.23
3.56	67.47	0.0099	0.3447	0.028718	74.31
3.58	67.85	0.00959	0.34218	0.028022	74.39
3.6	68.22	0.00929	0.33967	0.027345	74.48
3.62	68.59	0.009	0.33719	0.026685	74.56
3.64	68.96	0.00872	0.33473	0.026042	74.64
3.66	69.33	0.00845	0.3323	0.025415	74.72
3.68	69.7	0.00818	0.32988	0.024805	74.8
3.7	70.06	0.00793	0.32749	0.024211	74.88
3.72	70.42	0.00768	0.32512	0.023632	74.95
3.74	70.78	0.00745	0.32277	0.023067	75.03
3.76	71.13	0.00722	0.32045	0.022518	75.11
3.78	71.48	0.00699	0.31814	0.021982	75.18

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
3.8	71.83	0.00678	0.31586	0.02146	75.26
3.82	72.18	0.00657	0.31359	0.020952	75.33
3.84	72.53	0.00637	0.31135	0.020456	75.4
3.86	72.87	0.00617	0.30912	0.019973	75.48
3.88	73.21	0.00599	0.30692	0.019503	75.55
3.9	73.55	0.0058	0.30474	0.019044	75.62
3.92	73.89	0.00563	0.30258	0.018597	75.69
3.94	74.22	0.00546	0.30043	0.018162	75.76
3.96	74.55	0.00529	0.29831	0.017737	75.83
3.98	74.88	0.00513	0.2962	0.017323	75.9
4	75.21	0.00498	0.29412	0.01692	75.96
4.02	75.54	0.00483	0.29205	0.016527	76.03
4.04	75.86	0.00468	0.29	0.016144	76.1
4.06	76.18	0.00454	0.28797	0.01577	76.16
4.08	76.5	0.00441	0.28596	0.015406	76.23
4.1	76.81	0.00427	0.28397	0.015051	76.29
4.12	77.13	0.00415	0.282	0.014705	76.36
4.14	77.44	0.00402	0.28004	0.014368	76.42
4.16	77.75	0.0039	0.2781	0.014039	76.48
4.18	78.06	0.00379	0.27618	0.013718	76.55
4.2	78.37	0.00368	0.27427	0.013405	76.61
4.22	78.67	0.00357	0.27239	0.0131	76.67
4.24	78.97	0.00346	0.27052	0.012803	76.73
4.26	79.27	0.00336	0.26866	0.012513	76.79
4.28	79.57	0.00326	0.26683	0.01223	76.85
4.3	79.87	0.00317	0.26501	0.011954	76.91
4.32	80.16	0.00308	0.2632	0.011685	76.97
4.34	80.45	0.00299	0.26141	0.011423	77.02
4.36	80.75	0.0029	0.25964	0.011167	77.08
4.38	81.03	0.00282	0.25789	0.010917	77.14
4.4	81.32	0.00273	0.25615	0.010673	77.2
4.42	81.61	0.00266	0.25442	0.010436	77.25
4.44	81.89	0.00258	0.25271	0.010204	77.31

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
4.46	82.17	0.0025	0.25102	0.00998	77.36
4.48	82.45	0.00243	0.24934	0.00976	77.42
4.5	82.73	0.00236	0.24768	0.00954	77.47
4.52	83	0.0023	0.24603	0.00933	77.52
4.54	83.28	0.00223	0.24439	0.00913	77.58
4.56	83.55	0.00217	0.24278	0.00893	77.63
4.58	83.82	0.00211	0.24117	0.00873	77.68
4.6	84.09	0.00205	0.23958	0.00854	77.74
4.62	84.36	0.00199	0.238	0.00835	77.79
4.64	84.62	0.00193	0.23644	0.00817	77.84
4.66	84.88	0.00188	0.23489	0.008	77.89
4.68	85.15	0.00183	0.23335	0.00782	77.94
4.7	85.41	0.00177	0.23183	0.00765	77.99
4.72	85.67	0.00172	0.23032	0.00749	78.04
4.74	85.92	0.00168	0.22883	0.00733	78.09
4.76	86.18	0.00163	0.22734	0.00717	78.14
4.78	86.43	0.00159	0.22587	0.00702	78.18
4.8	86.69	0.00154	0.22442	0.00687	78.23
4.82	86.94	0.0015	0.22297	0.00672	78.28
4.84	87.18	0.00146	0.22154	0.00658	78.33
4.86	87.43	0.00142	0.22012	0.00644	78.37
4.88	87.68	0.00138	0.21872	0.0063	78.42
4.9	87.92	0.00134	0.21732	0.00617	78.47
4.92	88.17	0.0013	0.21594	0.00604	78.51
4.94	88.41	0.00127	0.21457	0.00591	78.56
4.96	88.65	0.00123	0.21321	0.00579	78.6
4.98	88.89	0.0012	0.21186	0.00567	78.65
5	89.12	0.00117	0.21053	0.00555	78.69
5.04	89.59	0.00111	0.20789	0.00532	78.78
5.08	90.06	0.00105	0.2053	0.0051	78.86
5.12	90.52	0.000993	0.20275	0.0049	78.95
5.16	90.97	0.000941	0.20025	0.0047	79.03
5.2	91.42	0.000892	0.19778	0.00451	79.11

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
5.24	91.86	0.000845	0.19536	0.00433	79.2
5.28	92.3	0.000802	0.19298	0.00415	79.28
5.32	92.73	0.00076	0.19064	0.00399	79.35
5.36	93.15	0.000721	0.18834	0.00383	79.43
5.4	93.58	0.000685	0.18608	0.00368	79.51
5.44	93.99	0.00065	0.18386	0.00353	79.58
5.48	94.4	0.000617	0.18167	0.0034	79.66
5.52	94.81	0.000586	0.17952	0.00326	79.73
5.56	95.21	0.000556	0.1774	0.00314	79.8
5.6	95.61	0.000529	0.17532	0.00302	79.88
5.64	96	0.000502	0.17327	0.0029	79.95
5.68	96.39	0.000478	0.17125	0.00279	80.02
5.72	96.78	0.000454	0.16927	0.00268	80.08
5.76	97.16	0.000432	0.16732	0.00258	80.15
5.8	97.53	0.000411	0.1654	0.00248	80.22
5.84	97.9	0.000391	0.16351	0.00239	80.28
5.88	98.27	0.000372	0.16165	0.0023	80.35
5.92	98.63	0.000354	0.15982	0.00222	80.41
5.96	98.99	0.000337	0.15802	0.00213	80.48
6	99.35	0.000321	0.15625	0.00205	80.54
6.04	99.7	0.000306	0.15451	0.00198	80.6
6.08	$1.0E{+}2$	0.000291	0.15279	0.00191	80.66
6.12	$1.0E{+}2$	0.000278	0.1511	0.00184	80.72
6.16	$1.0E{+}2$	0.000265	0.14944	0.00177	80.78
6.2	$1.0E{+}2$	0.000252	0.1478	0.00171	80.84
6.24	$1.0E{+}2$	0.000241	0.14619	0.00165	80.9
6.28	$1.0E{+}2$	0.000229	0.1446	0.00159	80.95
6.32	$1.0E{+}2$	0.000219	0.14303	0.00153	81.01
6.36	$1.0E{+}2$	0.000209	0.14149	0.00148	81.06
6.4	$1.0E{+}2$	0.000199	0.13998	0.00142	81.12
6.44	$1.0E{+}2$	0.00019	0.13848	0.00137	81.17
6.48	$1.0E{+}2$	0.000182	0.13701	0.00133	81.23
6.52	$1.0E{+}2$	0.000174	0.13556	0.00128	81.28

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
6.56	1.0E+2	0.000166	0.13414	0.00124	81.33
6.6	1.0E+2	0.000158	0.13273	0.00119	81.38
6.64	1.0E+2	0.000151	0.13135	0.00115	81.44
6.68	1.0E+2	0.000145	0.12998	0.00111	81.49
6.72	1.1E+2	0.000138	0.12864	0.00107	81.54
6.76	1.1E+2	0.000132	0.12731	0.00104	81.59
6.8	1.1E+2	0.000126	0.12601	0.001	81.63
6.84	1.1E+2	0.000121	0.12472	0.000969	81.68
6.88	1.1E+2	0.000116	0.12345	0.000937	81.73
6.92	1.1E+2	0.000111	0.12221	0.000906	81.78
6.96	1.1E+2	0.000106	0.12097	0.000876	81.82
7	1.1E+2	0.000101	0.11976	0.000847	81.87
7.04	1.1E+2	9.71E−5	0.11856	0.000819	81.92
7.08	1.1E+2	9.3$E-5$	0.11739	0.000792	81.96
7.12	1.1E+2	8.9$E-5$	0.11622	0.000766	82.01
7.16	1.1E+2	8.53E−5	0.11508	0.000741	82.05
7.2	1.1E+2	8.17E−5	0.11395	0.000717	82.09
7.24	1.1E+2	7.83E−5	0.11283	0.000694	82.14
7.28	1.1E+2	7.51E−5	0.11173	0.000672	82.18
7.32	1.1E+2	7.2$E-5$	0.11065	0.00065	82.22
7.36	1.1E+2	6.9$E-5$	0.10958	0.00063	82.26
7.4	1.1E+2	6.62E−5	0.10853	0.00061	82.3
7.44	1.1E+2	6.35E−5	0.10749	0.000591	82.34
7.48	1.1E+2	6.09E−5	0.10647	0.000572	82.39
7.52	1.1E+2	5.84E−5	0.10546	0.000554	82.43
7.56	1.1E+2	5.61E−5	0.10446	0.000537	82.46
7.6	1.1E+2	5.38E−5	0.10348	0.00052	82.5
7.64	1.1E+2	5.17E−5	0.10251	0.000504	82.54
7.68	1.1E+2	4.96E−5	0.10155	0.000489	82.58
7.72	1.1E+2	4.76E−5	0.10061	0.000474	82.62
7.76	1.1E+2	4.58E−5	0.099675	0.000459	82.66
7.8	1.1E+2	4.4$E-5$	0.098756	0.000445	82.69
7.84	1.1E+2	4.22E−5	0.097849	0.000432	82.73

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
7.88	1.1E+2	4.06E−5	0.096954	0.000419	82.77
7.92	1.1E+2	3.9E − 5	0.096071	0.000406	82.8
7.96	1.1E+2	3.75E−5	0.0952	0.000394	82.84
8	1.1E+2	3.61E−5	0.09434	0.000382	82.87
8.04	1.1E+2	3.47E−5	0.093491	0.000371	82.91
8.08	1.1E+2	3.33E−5	0.092653	0.00036	82.94
8.12	1.1E+2	3.21E−5	0.091826	0.000349	82.98
8.16	1.1E+2	3.09E−5	0.09101	0.000339	83.01
8.2	1.1E+2	2.97E−5	0.090204	0.000329	83.05
8.24	1.1E+2	2.86E−5	0.089408	0.00032	83.08
8.28	1.1E+2	2.75E−5	0.088623	0.00031	83.11
8.32	1.1E+2	2.65E−5	0.087848	0.000301	83.15
8.36	1.1E+2	2.55E−5	0.087082	0.000293	83.18
8.4	1.2E+2	2.45E−5	0.086326	0.000284	83.21
8.44	1.2E+2	2.36E−5	0.08558	0.000276	83.24
8.48	1.2E+2	2.28E−5	0.084842	0.000268	83.27
8.52	1.2E+2	2.19E−5	0.084114	0.000261	83.31
8.56	1.2E+2	2.11E−5	0.083396	0.000253	83.34
8.6	1.2E+2	2.04E−5	0.082686	0.000246	83.37
8.64	1.2E+2	1.96E−5	0.081984	0.000239	83.4
8.68	1.2E+2	1.89E−5	0.081292	0.000233	83.43
8.72	1.2E+2	1.82E−5	0.080608	0.000226	83.46
8.76	1.2E+2	1.76E−5	0.079932	0.00022	83.49
8.8	1.2E+2	1.7E − 5	0.079264	0.000214	83.52
8.84	1.2E+2	1.64E−5	0.078605	0.000208	83.55
8.88	1.2E+2	1.58E−5	0.077954	0.000202	83.57
8.92	1.2E+2	1.52E−5	0.07731	0.000197	83.6
8.96	1.2E+2	1.47E−5	0.076674	0.000191	83.63
9	1.2E+2	1.42E−5	0.076046	0.000186	83.66
9.04	1.2E+2	1.37E−5	0.075425	0.000181	83.69
9.08	1.2E+2	1.32E−5	0.074811	0.000176	83.72
9.12	1.2E+2	1.27E−5	0.074205	0.000172	83.74
9.16	1.2E+2	1.23E−5	0.073606	0.000167	83.77

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
9.2	$1.2E{+}2$	$1.19E{-}5$	0.073014	0.000163	83.8
9.24	$1.2E{+}2$	$1.15E{-}5$	0.072429	0.000158	83.82
9.28	$1.2E{+}2$	$1.11E{-}5$	0.071851	0.000154	83.85
9.32	$1.2E{+}2$	$1.07E{-}5$	0.071279	0.00015	83.88
9.36	$1.2E{+}2$	$1.03E{-}5$	0.070714	0.000146	83.9
9.4	$1.2E{+}2$	$9.99E{-}6$	0.070156	0.000142	83.93
9.44	$1.2E{+}2$	$9.65E{-}6$	0.069604	0.000139	83.95
9.48	$1.2E{+}2$	$9.33E{-}6$	0.069058	0.000135	83.98
9.52	$1.2E{+}2$	$9.02E{-}6$	0.068519	0.000132	84
9.56	$1.2E{+}2$	$8.72E{-}6$	0.067985	0.000128	84.03
9.6	$1.2E{+}2$	$8.43E{-}6$	0.067458	0.000125	84.05
9.64	$1.2E{+}2$	$8.15E{-}6$	0.066937	0.000122	84.08
9.68	$1.2E{+}2$	$7.88E{-}6$	0.066422	0.000119	84.1
9.72	$1.2E{+}2$	$7.62E{-}6$	0.065912	0.000116	84.13
9.76	$1.2E{+}2$	$7.37E{-}6$	0.065408	0.000113	84.15
9.8	$1.2E{+}2$	$7.13E{-}6$	0.06491	0.00011	84.17
9.84	$1.2E{+}2$	$6.9E-6$	0.064417	0.000107	84.2
9.88	$1.2E{+}2$	$6.68E{-}6$	0.06393	0.000104	84.22
9.92	$1.2E{+}2$	$6.46E{-}6$	0.063448	0.000102	84.24
9.96	$1.2E{+}2$	$6.26E{-}6$	0.062971	$9.93E{-}5$	84.27
10	$1.2E{+}2$	$6.06E{-}6$	0.0625	$9.69E{-}5$	84.29
10.1	$1.2E{+}2$	$5.58E{-}6$	0.061344	$9.1E-5$	84.35
10.2	$1.2E{+}2$	$5.15E{-}6$	0.060219	$8.56E{-}5$	84.4
10.3	$1.2E{+}2$	$4.76E{-}6$	0.059124	$8.05E{-}5$	84.45
10.4	$1.2E{+}2$	$4.4E-6$	0.058059	$7.58E{-}5$	84.51
10.5	$1.2E{+}2$	$4.07E{-}6$	0.057021	$7.14E{-}5$	84.56
10.6	$1.2E{+}2$	$3.77E{-}6$	0.05601	$6.72E{-}5$	84.61
10.7	$1.2E{+}2$	$3.49E{-}6$	0.055025	$6.34E{-}5$	84.66
10.8	$1.2E{+}2$	$3.23E{-}6$	0.054066	$5.98E{-}5$	84.71
10.9	$1.2E{+}2$	$3.0E-6$	0.053131	$5.64E{-}5$	84.76
11	$1.3E{+}2$	$2.78E{-}6$	0.052219	$5.32E{-}5$	84.81
11.1	$1.3E{+}2$	$2.58E{-}6$	0.051331	$5.03E{-}5$	84.85
11.2	$1.3E{+}2$	$2.4E-6$	0.050464	$4.75E{-}5$	84.9

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
11.3	$1.3E{+}2$	$2.23E{-}6$	0.049619	$4.49E{-}5$	84.94
11.4	$1.3E{+}2$	$2.07E{-}6$	0.048795	$4.25E{-}5$	84.99
11.5	$1.3E{+}2$	$1.93E{-}6$	0.04799	$4.02E{-}5$	85.03
11.6	$1.3E{+}2$	$1.79E{-}6$	0.047205	$3.8E-5$	85.07
11.7	$1.3E{+}2$	$1.67E{-}6$	0.046439	$3.6E-5$	85.11
11.8	$1.3E{+}2$	$1.56E{-}6$	0.045691	$3.41E{-}5$	85.16
11.9	$1.3E{+}2$	$1.45E{-}6$	0.044961	$3.23E{-}5$	85.2
12	$1.3E{+}2$	$1.36E{-}6$	0.044248	$3.06E{-}5$	85.24
12.1	$1.3E{+}2$	$1.27E{-}6$	0.043551	$2.91E{-}5$	85.28
12.2	$1.3E{+}2$	0.0	0.042871	$2.76E{-}5$	85.31
12.3	$1.3E{+}2$	0.0	0.042206	$2.62E{-}5$	85.35
12.4	$1.3E{+}2$	0.0	0.041556	$2.49E{-}5$	85.39
12.5	$1.3E{+}2$	0.0	0.040921	$2.36E{-}5$	85.43
12.6	$1.3E{+}2$	0.0	0.0403	$2.24E{-}5$	85.46
12.7	$1.3E{+}2$	0.0	0.039693	$2.13E{-}5$	85.5
12.8	$1.3E{+}2$	0.0	0.039099	$2.03E{-}5$	85.53
12.9	$1.3E{+}2$	0.0	0.038519	$1.93E{-}5$	85.57
13	$1.3E{+}2$	0.0	0.037951	$1.84E{-}5$	85.6
13.1	$1.3E{+}2$	0.0	0.037395	$1.75E{-}5$	85.63
13.2	$1.3E{+}2$	0.0	0.036851	$1.67E{-}5$	85.67
13.3	$1.3E{+}2$	0.0	0.036319	$1.59E{-}5$	85.7
13.4	$1.3E{+}2$	0.0	0.035799	$1.51E{-}5$	85.73
13.5	$1.3E{+}2$	0.0	0.035289	$1.44E{-}5$	85.76
13.6	$1.3E{+}2$	0.0	0.03479	$1.37E{-}5$	85.79
13.7	$1.3E{+}2$	0.0	0.034301	$1.31E{-}5$	85.83
13.8	$1.3E{+}2$	0.0	0.033823	$1.25E{-}5$	85.86
13.9	$1.3E{+}2$	0.0	0.033354	$1.19E{-}5$	85.89
14	$1.3E{+}2$	0.0	0.032895	$1.14E{-}5$	85.91
14.1	$1.3E{+}2$	0.0	0.032445	$1.09E{-}5$	85.94
14.2	$1.3E{+}2$	0.0	0.032004	$1.04E{-}5$	85.97
14.3	$1.3E{+}2$	0.0	0.031572	$9.95E{-}6$	86
14.4	$1.3E{+}2$	0.0	0.031149	$9.51E{-}6$	86.03
14.5	$1.3E{+}2$	0.0	0.030734	$9.09E{-}6$	86.05

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
14.6	$1.3E{+}2$	0.0	0.030327	$8.7E-6$	86.08
14.7	$1.3E{+}2$	0.0	0.029928	$8.32E-6$	86.11
14.8	$1.3E{+}2$	0.0	0.029537	$7.97E-6$	86.13
14.9	$1.3E{+}2$	0.0	0.029153	$7.63E-6$	86.16
15	$1.3E{+}2$	0.0	0.028777	$7.3E-6$	86.19
15.1	$1.3E{+}2$	0.0	0.028408	$7.0E-6$	86.21
15.2	$1.3E{+}2$	0.0	0.028046	$6.7E-6$	86.24
15.3	$1.3E{+}2$	0.0	0.02769	$6.42E-6$	86.26
15.4	$1.3E{+}2$	0.0	0.027342	$6.16E-6$	86.28
15.5	$1.3E{+}2$	0.0	0.027	$5.9E-6$	86.31
15.6	$1.3E{+}2$	0.0	0.026664	$5.66E-6$	86.33
15.7	$1.4E{+}2$	0.0	0.026334	$5.43E-6$	86.36
15.8	$1.4E{+}2$	0.0	0.026011	$5.21E-6$	86.38
15.9	$1.4E{+}2$	0.0	0.025693	$5.0E-6$	86.4
16	$1.4E{+}2$	0.0	0.025381	$4.8E-6$	86.42
16.1	$1.4E{+}2$	0.0	0.025074	$4.61E-6$	86.45
16.2	$1.4E{+}2$	0.0	0.024773	$4.43E-6$	86.47
16.3	$1.4E{+}2$	0.0	0.024478	$4.26E-6$	86.49
16.4	$1.4E{+}2$	0.0	0.024187	$4.09E-6$	86.51
16.5	$1.4E{+}2$	0.0	0.023902	$3.93E-6$	86.53
16.6	$1.4E{+}2$	0.0	0.023622	$3.78E-6$	86.55
16.7	$1.4E{+}2$	0.0	0.023346	$3.64E-6$	86.57
16.8	$1.4E{+}2$	0.0	0.023076	$3.5E-6$	86.59
16.9	$1.4E{+}2$	0.0	0.022809	$3.37E-6$	86.61
17	$1.4E{+}2$	0.0	0.022548	$3.24E-6$	86.63
17.1	$1.4E{+}2$	0.0	0.022291	$3.12E-6$	86.65
17.2	$1.4E{+}2$	0.0	0.022038	$3.0E-6$	86.67
17.3	$1.4E{+}2$	0.0	0.02179	$2.89E-6$	86.69
17.4	$1.4E{+}2$	0.0	0.021545	$2.78E-6$	86.71
17.5	$1.4E{+}2$	0.0	0.021305	$2.68E-6$	86.73
17.6	$1.4E{+}2$	0.0	0.021069	$2.58E-6$	86.75
17.7	$1.4E{+}2$	0.0	0.020836	$2.49E-6$	86.77
17.8	$1.4E{+}2$	0.0	0.020608	$2.4E-6$	86.78

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
17.9	$1.4E{+}2$	0.0	0.020383	$2.31E{-}6$	86.8
18	$1.4E{+}2$	0.0	0.020161	$2.23E{-}6$	86.82
18.1	$1.4E{+}2$	0.0	0.019944	$2.15E{-}6$	86.84
18.2	$1.4E{+}2$	0.0	0.019729	$2.08E{-}6$	86.86
18.3	$1.4E{+}2$	0.0	0.019518	$2.0E-6$	86.87
18.4	$1.4E{+}2$	0.0	0.019311	$1.93E{-}6$	86.89
18.5	$1.4E{+}2$	0.0	0.019107	$1.86E{-}6$	86.91
18.6	$1.4E{+}2$	0.0	0.018906	$1.8E-6$	86.92
18.7	$1.4E{+}2$	0.0	0.018708	$1.74E{-}6$	86.94
18.8	$1.4E{+}2$	0.0	0.018513	$1.68E{-}6$	86.96
18.9	$1.4E{+}2$	0.0	0.018321	$1.62E{-}6$	86.97
19	$1.4E{+}2$	0.0	0.018132	$1.57E{-}6$	86.99
19.1	$1.4E{+}2$	0.0	0.017946	$1.51E{-}6$	87
19.2	$1.4E{+}2$	0.0	0.017763	$1.46E{-}6$	87.02
19.3	$1.4E{+}2$	0.0	0.017583	$1.41E{-}6$	87.03
19.4	$1.4E{+}2$	0.0	0.017405	$1.37E{-}6$	87.05
19.5	$1.4E{+}2$	0.0	0.01723	$1.32E{-}6$	87.06
19.6	$1.4E{+}2$	0.0	0.017058	$1.28E{-}6$	87.08
19.7	$1.4E{+}2$	0.0	0.016888	0.0	87.09
19.8	$1.4E{+}2$	0.0	0.016721	0.0	87.11
19.9	$1.4E{+}2$	0.0	0.016556	0.0	87.12
20	$1.4E{+}2$	0.0	0.016393	0.0	87.14
20.1	$1.4E{+}2$	0.0	0.016233	0.0	87.15
20.2	$1.4E{+}2$	0.0	0.016076	0.0	87.17
20.3	$1.4E{+}2$	0.0	0.01592	0.0	87.18
20.4	$1.4E{+}2$	0.0	0.015767	0.0	87.19
20.5	$1.4E{+}2$	0.0	0.015616	0.0	87.21
20.6	$1.4E{+}2$	0.0	0.015467	0.0	87.22
20.7	$1.4E{+}2$	0.0	0.01532	0.0	87.23
20.8	$1.4E{+}2$	0.0	0.015175	0.0	87.25
20.9	$1.4E{+}2$	0.0	0.015033	0.0	87.26
21	$1.4E{+}2$	0.0	0.014892	0.0	87.27
21.1	$1.4E{+}2$	0.0	0.014753	0.0	87.29

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
21.2	$1.4E{+}2$	0.0	0.014616	0.0	87.3
21.3	$1.4E{+}2$	0.0	0.014482	0.0	87.31
21.4	$1.4E{+}2$	0.0	0.014348	0.0	87.32
21.5	$1.4E{+}2$	0.0	0.014217	0.0	87.34
21.6	$1.4E{+}2$	0.0	0.014088	0.0	87.35
21.7	$1.4E{+}2$	0.0	0.01396	0.0	87.36
21.8	$1.4E{+}2$	0.0	0.013834	0.0	87.37
21.9	$1.4E{+}2$	0.0	0.01371	0.0	87.39
22	$1.4E{+}2$	0.0	0.013587	0.0	87.4
22.1	$1.4E{+}2$	0.0	0.013466	0.0	87.41
22.2	$1.4E{+}2$	0.0	0.013347	0.0	87.42
22.3	$1.4E{+}2$	0.0	0.013229	0.0	87.43
22.4	$1.4E{+}2$	0.0	0.013112	0.0	87.44
22.5	$1.4E{+}2$	0.0	0.012998	0.0	87.46
22.6	$1.4E{+}2$	0.0	0.012884	0.0	87.47
22.7	$1.4E{+}2$	0.0	0.012772	0.0	87.48
22.8	$1.4E{+}2$	0.0	0.012662	0.0	87.49
22.9	$1.4E{+}2$	0.0	0.012553	0.0	87.5
23	$1.4E{+}2$	0.0	0.012446	0.0	87.51
23.1	$1.4E{+}2$	0.0	0.012339	0.0	87.52
23.2	$1.4E{+}2$	0.0	0.012235	0.0	87.53
23.3	$1.4E{+}2$	0.0	0.012131	0.0	87.54
23.4	$1.4E{+}2$	0.0	0.012029	0.0	87.55
23.5	$1.4E{+}2$	0.0	0.011928	0.0	87.56
23.6	$1.4E{+}2$	0.0	0.011828	0.0	87.57
23.7	$1.4E{+}2$	0.0	0.01173	0.0	87.58
23.8	$1.4E{+}2$	0.0	0.011633	0.0	87.59
23.9	$1.4E{+}2$	0.0	0.011536	0.0	87.6
24	$1.4E{+}2$	0.0	0.011442	0.0	87.61
24.1	$1.4E{+}2$	0.0	0.011348	0.0	87.62
24.2	$1.4E{+}2$	0.0	0.011255	0.0	87.63
24.3	$1.4E{+}2$	0.0	0.011164	0.0	87.64
24.4	$1.4E{+}2$	0.0	0.011074	0.0	87.65

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
24.5	$1.4E{+}2$	0.0	0.010984	0.0	87.66
24.6	$1.4E{+}2$	0.0	0.010896	0.0	87.67
24.7	$1.4E{+}2$	0.0	0.010809	0.0	87.68
24.8	$1.4E{+}2$	0.0	0.010723	0.0	87.69
24.9	$1.4E{+}2$	0.0	0.010638	0.0	87.7
25	$1.4E{+}2$	0.0	0.010554	0.0	87.71
25.1	$1.4E{+}2$	0.0	0.010471	0.0	87.72
25.2	$1.4E{+}2$	0.0	0.010389	0.0	87.73
25.3	$1.4E{+}2$	0.0	0.010308	0.0	87.74
25.4	$1.4E{+}2$	0.0	0.010228	0.0	87.75
25.5	$1.4E{+}2$	0.0	0.010148	0.0	87.75
25.6	$1.4E{+}2$	0.0	0.01007	0.0	87.76
25.7	$1.4E{+}2$	0.0	0.00999	0.0	87.77
25.8	$1.4E{+}2$	0.0	0.00992	0.0	87.78
25.9	$1.4E{+}2$	0.0	0.00984	0.0	87.79
26	$1.4E{+}2$	0.0	0.00977	0.0	87.8
26.1	$1.4E{+}2$	0.0	0.00969	0.0	87.81
26.2	$1.4E{+}2$	0.0	0.00962	0.0	87.81
26.3	$1.4E{+}2$	0.0	0.00955	0.0	87.82
26.4	$1.4E{+}2$	0.0	0.00947	0.0	87.83
26.5	$1.4E{+}2$	0.0	0.0094	0.0	87.84
26.6	$1.4E{+}2$	0.0	0.00933	0.0	87.85
26.7	$1.4E{+}2$	0.0	0.00926	0.0	87.86
26.8	$1.4E{+}2$	0.0	0.0092	0.0	87.86
26.9	$1.5E{+}2$	0.0	0.00913	0.0	87.87
27	$1.5E{+}2$	0.0	0.00906	0.0	87.88
27.1	$1.5E{+}2$	0.0	0.009	0.0	87.89
27.2	$1.5E{+}2$	0.0	0.00893	0.0	87.89
27.3	$1.5E{+}2$	0.0	0.00887	0.0	87.9
27.4	$1.5E{+}2$	0.0	0.0088	0.0	87.91
27.5	$1.5E{+}2$	0.0	0.00874	0.0	87.92
27.6	$1.5E{+}2$	0.0	0.00868	0.0	87.92
27.7	$1.5E{+}2$	0.0	0.00861	0.0	87.93

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
27.8	1.5E+2	0.0	0.00855	0.0	87.94
27.9	1.5E+2	0.0	0.00849	0.0	87.95
28	1.5E+2	0.0	0.00843	0.0	87.95
28.1	1.5E+2	0.0	0.00837	0.0	87.96
28.2	1.5E+2	0.0	0.00831	0.0	87.97
28.3	1.5E+2	0.0	0.00826	0.0	87.98
28.4	1.5E+2	0.0	0.0082	0.0	87.98
28.5	1.5E+2	0.0	0.00814	0.0	87.99
28.6	1.5E+2	0.0	0.00808	0.0	88
28.7	1.5E+2	0.0	0.00803	0.0	88
28.8	1.5E+2	0.0	0.00797	0.0	88.01
28.9	1.5E+2	0.0	0.00792	0.0	88.02
29	1.5E+2	0.0	0.00786	0.0	88.03
29.1	1.5E+2	0.0	0.00781	0.0	88.03
29.2	1.5E+2	0.0	0.00776	0.0	88.04
29.3	1.5E+2	0.0	0.00771	0.0	88.05
29.4	1.5E+2	0.0	0.00765	0.0	88.05
29.5	1.5E+2	0.0	0.0076	0.0	88.06
29.6	1.5E+2	0.0	0.00755	0.0	88.07
29.7	1.5E+2	0.0	0.0075	0.0	88.07
29.8	1.5E+2	0.0	0.00745	0.0	88.08
29.9	1.5E+2	0.0	0.0074	0.0	88.08
30	1.5E+2	0.0	0.00735	0.0	88.09
30.1	1.5E+2	0.0	0.0073	0.0	88.1
30.2	1.5E+2	0.0	0.00726	0.0	88.1
30.3	1.5E+2	0.0	0.00721	0.0	88.11
30.4	1.5E+2	0.0	0.00716	0.0	88.12
30.5	1.5E+2	0.0	0.00712	0.0	88.12
30.6	1.5E+2	0.0	0.00707	0.0	88.13
30.7	1.5E+2	0.0	0.00702	0.0	88.13
30.8	1.5E+2	0.0	0.00698	0.0	88.14
30.9	1.5E+2	0.0	0.00693	0.0	88.15
31	1.5E+2	0.0	0.00689	0.0	88.15

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
31.1	1.5E+2	0.0	0.00685	0.0	88.16
31.2	1.5E+2	0.0	0.0068	0.0	88.16
31.3	1.5E+2	0.0	0.00676	0.0	88.17
31.4	1.5E+2	0.0	0.00672	0.0	88.18
31.5	1.5E+2	0.0	0.00667	0.0	88.18
31.6	1.5E+2	0.0	0.00663	0.0	88.19
31.7	1.5E+2	0.0	0.00659	0.0	88.19
31.8	1.5E+2	0.0	0.00655	0.0	88.2
31.9	1.5E+2	0.0	0.00651	0.0	88.2
32	1.5E+2	0.0	0.00647	0.0	88.21
32.1	1.5E+2	0.0	0.00643	0.0	88.22
32.2	1.5E+2	0.0	0.00639	0.0	88.22
32.3	1.5E+2	0.0	0.00635	0.0	88.23
32.4	1.5E+2	0.0	0.00631	0.0	88.23
32.5	1.5E+2	0.0	0.00627	0.0	88.24
32.6	1.5E+2	0.0	0.00623	0.0	88.24
32.7	1.5E+2	0.0	0.0062	0.0	88.25
32.8	1.5E+2	0.0	0.00616	0.0	88.25
32.9	1.5E+2	0.0	0.00612	0.0	88.26
33	1.5E+2	0.0	0.00608	0.0	88.26
33.1	1.5E+2	0.0	0.00605	0.0	88.27
33.2	1.5E+2	0.0	0.00601	0.0	88.27
33.3	1.5E+2	0.0	0.00598	0.0	88.28
33.4	1.5E+2	0.0	0.00594	0.0	88.29
33.5	1.5E+2	0.0	0.00591	0.0	88.29
33.6	1.5E+2	0.0	0.00587	0.0	88.3
33.7	1.5E+2	0.0	0.00584	0.0	88.3
33.8	1.5E+2	0.0	0.0058	0.0	88.31
33.9	1.5E+2	0.0	0.00577	0.0	88.31
34	1.5E+2	0.0	0.00573	0.0	88.32
34.1	1.5E+2	0.0	0.0057	0.0	88.32
34.2	1.5E+2	0.0	0.00567	0.0	88.33
34.3	1.5E+2	0.0	0.00563	0.0	88.33

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
34.4	1.5E+2	0.0	0.0056	0.0	88.33
34.5	1.5E+2	0.0	0.00557	0.0	88.34
34.6	1.5E+2	0.0	0.00554	0.0	88.34
34.7	1.5E+2	0.0	0.00551	0.0	88.35
34.8	1.5E+2	0.0	0.00547	0.0	88.35
34.9	1.5E+2	0.0	0.00544	0.0	88.36
35	1.5E+2	0.0	0.00541	0.0	88.36
35.1	1.5E+2	0.0	0.00538	0.0	88.37
35.2	1.5E+2	0.0	0.00535	0.0	88.37
35.3	1.5E+2	0.0	0.00532	0.0	88.38
35.4	1.5E+2	0.0	0.00529	0.0	88.38
35.5	1.5E+2	0.0	0.00526	0.0	88.39
35.6	1.5E+2	0.0	0.00523	0.0	88.39
35.7	1.5E+2	0.0	0.0052	0.0	88.4
35.8	1.5E+2	0.0	0.00517	0.0	88.4
35.9	1.5E+2	0.0	0.00515	0.0	88.4
36	1.5E+2	0.0	0.00512	0.0	88.41
36.1	1.5E+2	0.0	0.00509	0.0	88.41
36.2	1.5E+2	0.0	0.00506	0.0	88.42
36.3	1.5E+2	0.0	0.00503	0.0	88.42
36.4	1.5E+2	0.0	0.00501	0.0	88.43
36.5	1.5E+2	0.0	0.00498	0.0	88.43
36.6	1.5E+2	0.0	0.00495	0.0	88.43
36.7	1.5E+2	0.0	0.00493	0.0	88.44
36.8	1.5E+2	0.0	0.0049	0.0	88.44
36.9	1.5E+2	0.0	0.00487	0.0	88.45
37	1.5E+2	0.0	0.00485	0.0	88.45
37.1	1.5E+2	0.0	0.00482	0.0	88.46
37.2	1.5E+2	0.0	0.00479	0.0	88.46
37.3	1.5E+2	0.0	0.00477	0.0	88.46
37.4	1.5E+2	0.0	0.00474	0.0	88.47
37.5	1.5E+2	0.0	0.00472	0.0	88.47
37.6	1.5E+2	0.0	0.00469	0.0	88.48

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
37.7	$1.5E+2$	0.0	0.00467	0.0	88.48
37.8	$1.5E+2$	0.0	0.00464	0.0	88.48
37.9	$1.5E+2$	0.0	0.00462	0.0	88.49
38	$1.5E+2$	0.0	0.0046	0.0	88.49
38.1	$1.5E+2$	0.0	0.00457	0.0	88.5
38.2	$1.5E+2$	0.0	0.00455	0.0	88.5
38.3	$1.5E+2$	0.0	0.00452	0.0	88.5
38.4	$1.5E+2$	0.0	0.0045	0.0	88.51
38.5	$1.5E+2$	0.0	0.00448	0.0	88.51
38.6	$1.5E+2$	0.0	0.00445	0.0	88.52
38.7	$1.5E+2$	0.0	0.00443	0.0	88.52
38.8	$1.5E+2$	0.0	0.00441	0.0	88.52
38.9	$1.5E+2$	0.0	0.00439	0.0	88.53
39	$1.5E+2$	0.0	0.00436	0.0	88.53
39.1	$1.5E+2$	0.0	0.00434	0.0	88.53
39.2	$1.5E+2$	0.0	0.00432	0.0	88.54
39.3	$1.5E+2$	0.0	0.0043	0.0	88.54
39.4	$1.5E+2$	0.0	0.00428	0.0	88.55
39.5	$1.5E+2$	0.0	0.00425	0.0	88.55
39.6	$1.5E+2$	0.0	0.00423	0.0	88.55
39.7	$1.5E+2$	0.0	0.00421	0.0	88.56
39.8	$1.5E+2$	0.0	0.00419	0.0	88.56
39.9	$1.5E+2$	0.0	0.00417	0.0	88.56
40	$1.5E+2$	0.0	0.00415	0.0	88.57
40.1	$1.5E+2$	0.0	0.00413	0.0	88.57
40.2	$1.5E+2$	0.0	0.00411	0.0	88.58
40.3	$1.5E+2$	0.0	0.00409	0.0	88.58
40.4	$1.5E+2$	0.0	0.00407	0.0	88.58
40.5	$1.5E+2$	0.0	0.00405	0.0	88.59
40.6	$1.5E+2$	0.0	0.00403	0.0	88.59
40.7	$1.5E+2$	0.0	0.00401	0.0	88.59
40.8	$1.5E+2$	0.0	0.00399	0.0	88.6
40.9	$1.5E+2$	0.0	0.00397	0.0	88.6

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
41	$1.5E{+}2$	0.0	0.00395	0.0	88.6
41.1	$1.5E{+}2$	0.0	0.00393	0.0	88.61
41.2	$1.5E{+}2$	0.0	0.00391	0.0	88.61
41.3	$1.5E{+}2$	0.0	0.00389	0.0	88.61
41.4	$1.5E{+}2$	0.0	0.00387	0.0	88.62
41.5	$1.5E{+}2$	0.0	0.00386	0.0	88.62
41.6	$1.5E{+}2$	0.0	0.00384	0.0	88.62
41.7	$1.5E{+}2$	0.0	0.00382	0.0	88.63
41.8	$1.5E{+}2$	0.0	0.0038	0.0	88.63
41.9	$1.5E{+}2$	0.0	0.00378	0.0	88.63
42	$1.5E{+}2$	0.0	0.00377	0.0	88.64
42.1	$1.5E{+}2$	0.0	0.00375	0.0	88.64
42.2	$1.5E{+}2$	0.0	0.00373	0.0	88.64
42.3	$1.5E{+}2$	0.0	0.00371	0.0	88.65
42.4	$1.5E{+}2$	0.0	0.00369	0.0	88.65
42.5	$1.5E{+}2$	0.0	0.00368	0.0	88.65
42.6	$1.5E{+}2$	0.0	0.00366	0.0	88.66
42.7	$1.5E{+}2$	0.0	0.00364	0.0	88.66
42.8	$1.5E{+}2$	0.0	0.00363	0.0	88.66
42.9	$1.5E{+}2$	0.0	0.00361	0.0	88.66
43	$1.5E{+}2$	0.0	0.00359	0.0	88.67
43.1	$1.5E{+}2$	0.0	0.00358	0.0	88.67
43.2	$1.5E{+}2$	0.0	0.00356	0.0	88.67
43.3	$1.5E{+}2$	0.0	0.00354	0.0	88.68
43.4	$1.5E{+}2$	0.0	0.00353	0.0	88.68
43.5	$1.5E{+}2$	0.0	0.00351	0.0	88.68
43.6	$1.5E{+}2$	0.0	0.00349	0.0	88.69
43.7	$1.5E{+}2$	0.0	0.00348	0.0	88.69
43.8	$1.5E{+}2$	0.0	0.00346	0.0	88.69
43.9	$1.5E{+}2$	0.0	0.00345	0.0	88.7
44	$1.5E{+}2$	0.0	0.00343	0.0	88.7
44.1	$1.5E{+}2$	0.0	0.00342	0.0	88.7
44.2	$1.5E{+}2$	0.0	0.0034	0.0	88.7

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
44.3	$1.5E{+}2$	0.0	0.00339	0.0	88.71
44.4	$1.5E{+}2$	0.0	0.00337	0.0	88.71
44.5	$1.5E{+}2$	0.0	0.00336	0.0	88.71
44.6	$1.5E{+}2$	0.0	0.00334	0.0	88.72
44.7	$1.5E{+}2$	0.0	0.00333	0.0	88.72
44.8	$1.5E{+}2$	0.0	0.00331	0.0	88.72
44.9	$1.5E{+}2$	0.0	0.0033	0.0	88.72
45	$1.5E{+}2$	0.0	0.00328	0.0	88.73
45.1	$1.5E{+}2$	0.0	0.00327	0.0	88.73
45.2	$1.5E{+}2$	0.0	0.00325	0.0	88.73
45.3	$1.5E{+}2$	0.0	0.00324	0.0	88.74
45.4	$1.5E{+}2$	0.0	0.00322	0.0	88.74
45.5	$1.5E{+}2$	0.0	0.00321	0.0	88.74
45.6	$1.5E{+}2$	0.0	0.0032	0.0	88.74
45.7	$1.5E{+}2$	0.0	0.00318	0.0	88.75
45.8	$1.5E{+}2$	0.0	0.00317	0.0	88.75
45.9	$1.5E{+}2$	0.0	0.00315	0.0	88.75
46	$1.5E{+}2$	0.0	0.00314	0.0	88.75
46.1	$1.5E{+}2$	0.0	0.00313	0.0	88.76
46.2	$1.5E{+}2$	0.0	0.00311	0.0	88.76
46.3	$1.5E{+}2$	0.0	0.0031	0.0	88.76
46.4	$1.5E{+}2$	0.0	0.00309	0.0	88.77
46.5	$1.5E{+}2$	0.0	0.00307	0.0	88.77
46.6	$1.5E{+}2$	0.0	0.00306	0.0	88.77
46.7	$1.5E{+}2$	0.0	0.00305	0.0	88.77
46.8	$1.5E{+}2$	0.0	0.00303	0.0	88.78
46.9	$1.5E{+}2$	0.0	0.00302	0.0	88.78
47	$1.5E{+}2$	0.0	0.00301	0.0	88.78
47.1	$1.5E{+}2$	0.0	0.003	0.0	88.78
47.2	$1.5E{+}2$	0.0	0.00298	0.0	88.79
47.3	$1.5E{+}2$	0.0	0.00297	0.0	88.79
47.4	$1.5E{+}2$	0.0	0.00296	0.0	88.79
47.5	$1.5E{+}2$	0.0	0.00295	0.0	88.79

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
47.6	$1.5E{+}2$	0.0	0.00293	0.0	88.8
47.7	$1.5E{+}2$	0.0	0.00292	0.0	88.8
47.8	$1.5E{+}2$	0.0	0.00291	0.0	88.8
47.9	$1.5E{+}2$	0.0	0.0029	0.0	88.8
48	$1.5E{+}2$	0.0	0.00289	0.0	88.81
48.1	$1.5E{+}2$	0.0	0.00287	0.0	88.81
48.2	$1.5E{+}2$	0.0	0.00286	0.0	88.81
48.3	$1.5E{+}2$	0.0	0.00285	0.0	88.81
48.4	$1.5E{+}2$	0.0	0.00284	0.0	88.82
48.5	$1.5E{+}2$	0.0	0.00283	0.0	88.82
48.6	$1.5E{+}2$	0.0	0.00281	0.0	88.82
48.7	$1.5E{+}2$	0.0	0.0028	0.0	88.82
48.8	$1.5E{+}2$	0.0	0.00279	0.0	88.83
48.9	$1.5E{+}2$	0.0	0.00278	0.0	88.83
49	$1.5E{+}2$	0.0	0.00277	0.0	88.83
49.1	$1.5E{+}2$	0.0	0.00276	0.0	88.83
49.2	$1.5E{+}2$	0.0	0.00275	0.0	88.84
49.3	$1.5E{+}2$	0.0	0.00274	0.0	88.84
49.4	$1.5E{+}2$	0.0	0.00272	0.0	88.84
49.5	$1.5E{+}2$	0.0	0.00271	0.0	88.84
49.6	$1.5E{+}2$	0.0	0.0027	0.0	88.84
49.7	$1.5E{+}2$	0.0	0.00269	0.0	88.85
49.8	$1.5E{+}2$	0.0	0.00268	0.0	88.85
49.9	$1.5E{+}2$	0.0	0.00267	0.0	88.85
50	$1.5E{+}2$	0.0	0.00266	0.0	88.85
50.1	$1.5E{+}2$	0.0	0.00265	0.0	88.86
50.2	$1.5E{+}2$	0.0	0.00264	0.0	88.86
50.3	$1.5E{+}2$	0.0	0.00263	0.0	88.86
50.4	$1.5E{+}2$	0.0	0.00262	0.0	88.86
50.5	$1.5E{+}2$	0.0	0.00261	0.0	88.87
50.6	$1.5E{+}2$	0.0	0.0026	0.0	88.87
50.7	$1.5E{+}2$	0.0	0.00259	0.0	88.87
50.8	$1.5E{+}2$	0.0	0.00258	0.0	88.87

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
50.9	$1.5E{+}2$	0.0	0.00257	0.0	88.87
51	$1.5E{+}2$	0.0	0.00256	0.0	88.88
51.1	$1.5E{+}2$	0.0	0.00255	0.0	88.88
51.2	$1.5E{+}2$	0.0	0.00254	0.0	88.88
51.3	$1.5E{+}2$	0.0	0.00253	0.0	88.88
51.4	$1.5E{+}2$	0.0	0.00252	0.0	88.89
51.5	$1.5E{+}2$	0.0	0.00251	0.0	88.89
51.6	$1.5E{+}2$	0.0	0.0025	0.0	88.89
51.7	$1.5E{+}2$	0.0	0.00249	0.0	88.89
51.8	$1.5E{+}2$	0.0	0.00248	0.0	88.89
51.9	$1.5E{+}2$	0.0	0.00247	0.0	88.9
52	$1.5E{+}2$	0.0	0.00246	0.0	88.9
52.1	$1.5E{+}2$	0.0	0.00245	0.0	88.9
52.2	$1.5E{+}2$	0.0	0.00244	0.0	88.9
52.3	$1.5E{+}2$	0.0	0.00243	0.0	88.9
52.4	$1.5E{+}2$	0.0	0.00242	0.0	88.91
52.5	$1.5E{+}2$	0.0	0.00241	0.0	88.91
52.6	$1.5E{+}2$	0.0	0.0024	0.0	88.91
52.7	$1.5E{+}2$	0.0	0.00239	0.0	88.91
52.8	$1.5E{+}2$	0.0	0.00239	0.0	88.91
52.9	$1.5E{+}2$	0.0	0.00238	0.0	88.92
53	$1.5E{+}2$	0.0	0.00237	0.0	88.92
53.1	$1.5E{+}2$	0.0	0.00236	0.0	88.92
53.2	$1.5E{+}2$	0.0	0.00235	0.0	88.92
53.3	$1.5E{+}2$	0.0	0.00234	0.0	88.93
53.4	$1.5E{+}2$	0.0	0.00233	0.0	88.93
53.5	$1.5E{+}2$	0.0	0.00232	0.0	88.93
53.6	$1.5E{+}2$	0.0	0.00232	0.0	88.93
53.7	$1.5E{+}2$	0.0	0.00231	0.0	88.93
53.8	$1.5E{+}2$	0.0	0.0023	0.0	88.94
53.9	$1.5E{+}2$	0.0	0.00229	0.0	88.94
54	$1.5E{+}2$	0.0	0.00228	0.0	88.94
54.1	$1.5E{+}2$	0.0	0.00227	0.0	88.94

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
54.2	$1.5E{+}2$	0.0	0.00226	0.0	88.94
54.3	$1.5E{+}2$	0.0	0.00226	0.0	88.94
54.4	$1.5E{+}2$	0.0	0.00225	0.0	88.95
54.5	$1.5E{+}2$	0.0	0.00224	0.0	88.95
54.6	$1.5E{+}2$	0.0	0.00223	0.0	88.95
54.7	$1.5E{+}2$	0.0	0.00222	0.0	88.95
54.8	$1.5E{+}2$	0.0	0.00222	0.0	88.95
54.9	$1.5E{+}2$	0.0	0.00221	0.0	88.96
55	$1.5E{+}2$	0.0	0.0022	0.0	88.96
55.1	$1.5E{+}2$	0.0	0.00219	0.0	88.96
55.2	$1.5E{+}2$	0.0	0.00218	0.0	88.96
55.3	$1.5E{+}2$	0.0	0.00218	0.0	88.96
55.4	$1.5E{+}2$	0.0	0.00217	0.0	88.97
55.5	$1.5E{+}2$	0.0	0.00216	0.0	88.97
55.6	$1.5E{+}2$	0.0	0.00215	0.0	88.97
55.7	$1.5E{+}2$	0.0	0.00214	0.0	88.97
55.8	$1.5E{+}2$	0.0	0.00214	0.0	88.97
55.9	$1.5E{+}2$	0.0	0.00213	0.0	88.98
56	$1.5E{+}2$	0.0	0.00212	0.0	88.98
56.1	$1.5E{+}2$	0.0	0.00211	0.0	88.98
56.2	$1.5E{+}2$	0.0	0.00211	0.0	88.98
56.3	$1.5E{+}2$	0.0	0.0021	0.0	88.98
56.4	$1.5E{+}2$	0.0	0.00209	0.0	88.98
56.5	$1.5E{+}2$	0.0	0.00208	0.0	88.99
56.6	$1.5E{+}2$	0.0	0.00208	0.0	88.99
56.7	$1.5E{+}2$	0.0	0.00207	0.0	88.99
56.8	$1.5E{+}2$	0.0	0.00206	0.0	88.99
56.9	$1.5E{+}2$	0.0	0.00205	0.0	88.99
57	$1.5E{+}2$	0.0	0.00205	0.0	88.99
57.1	$1.5E{+}2$	0.0	0.00204	0.0	89
57.2	$1.5E{+}2$	0.0	0.00203	0.0	89
57.3	$1.5E{+}2$	0.0	0.00203	0.0	89
57.4	$1.5E{+}2$	0.0	0.00202	0.0	89

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
57.5	$1.5E+2$	0.0	0.00201	0.0	89
57.6	$1.5E+2$	0.0	0.00201	0.0	89.01
57.7	$1.5E+2$	0.0	0.002	0.0	89.01
57.8	$1.5E+2$	0.0	0.00199	0.0	89.01
57.9	$1.5E+2$	0.0	0.00198	0.0	89.01
58	$1.5E+2$	0.0	0.00198	0.0	89.01
58.1	$1.5E+2$	0.0	0.00197	0.0	89.01
58.2	$1.5E+2$	0.0	0.00196	0.0	89.02
58.3	$1.5E+2$	0.0	0.00196	0.0	89.02
58.4	$1.5E+2$	0.0	0.00195	0.0	89.02
58.5	$1.5E+2$	0.0	0.00194	0.0	89.02
58.6	$1.5E+2$	0.0	0.00194	0.0	89.02
58.7	$1.5E+2$	0.0	0.00193	0.0	89.02
58.8	$1.5E+2$	0.0	0.00192	0.0	89.03
58.9	$1.5E+2$	0.0	0.00192	0.0	89.03
59	$1.5E+2$	0.0	0.00191	0.0	89.03
59.1	$1.5E+2$	0.0	0.00191	0.0	89.03
59.2	$1.5E+2$	0.0	0.0019	0.0	89.03
59.3	$1.5E+2$	0.0	0.00189	0.0	89.03
59.4	$1.5E+2$	0.0	0.00189	0.0	89.04
59.5	$1.5E+2$	0.0	0.00188	0.0	89.04
59.6	$1.5E+2$	0.0	0.00187	0.0	89.04
59.7	$1.5E+2$	0.0	0.00187	0.0	89.04
59.8	$1.5E+2$	0.0	0.00186	0.0	89.04
59.9	$1.5E+2$	0.0	0.00185	0.0	89.04
60	$1.5E+2$	0.0	0.00185	0.0	89.05
60.1	$1.5E+2$	0.0	0.00184	0.0	89.05
60.2	$1.5E+2$	0.0	0.00184	0.0	89.05
60.3	$1.5E+2$	0.0	0.00183	0.0	89.05
60.4	$1.5E+2$	0.0	0.00182	0.0	89.05
60.5	$1.5E+2$	0.0	0.00182	0.0	89.05
60.6	$1.5E+2$	0.0	0.00181	0.0	89.05
60.7	$1.5E+2$	0.0	0.00181	0.0	89.06

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
60.8	1.5E+2	0.0	0.0018	0.0	89.06
60.9	1.5E+2	0.0	0.00179	0.0	89.06
61	1.5E+2	0.0	0.00179	0.0	89.06
61.1	1.5E+2	0.0	0.00178	0.0	89.06
61.2	1.5E+2	0.0	0.00178	0.0	89.06
61.3	1.5E+2	0.0	0.00177	0.0	89.07
61.4	1.5E+2	0.0	0.00177	0.0	89.07
61.5	1.5E+2	0.0	0.00176	0.0	89.07
61.6	1.5E+2	0.0	0.00175	0.0	89.07
61.7	1.5E+2	0.0	0.00175	0.0	89.07
61.8	1.5E+2	0.0	0.00174	0.0	89.07
61.9	1.5E+2	0.0	0.00174	0.0	89.07
62	1.5E+2	0.0	0.00173	0.0	89.08
62.1	1.5E+2	0.0	0.00173	0.0	89.08
62.2	1.5E+2	0.0	0.00172	0.0	89.08
62.3	1.5E+2	0.0	0.00171	0.0	89.08
62.4	1.5E+2	0.0	0.00171	0.0	89.08
62.5	1.5E+2	0.0	0.0017	0.0	89.08
62.6	1.5E+2	0.0	0.0017	0.0	89.08
62.7	1.5E+2	0.0	0.00169	0.0	89.09
62.8	1.5E+2	0.0	0.00169	0.0	89.09
62.9	1.5E+2	0.0	0.00168	0.0	89.09
63	1.5E+2	0.0	0.00168	0.0	89.09
63.1	1.5E+2	0.0	0.00167	0.0	89.09
63.2	1.5E+2	0.0	0.00167	0.0	89.09
63.3	1.5E+2	0.0	0.00166	0.0	89.09
63.4	1.5E+2	0.0	0.00166	0.0	89.1
63.5	1.5E+2	0.0	0.00165	0.0	89.1
63.6	1.5E+2	0.0	0.00165	0.0	89.1
63.7	1.5E+2	0.0	0.00164	0.0	89.1
63.8	1.5E+2	0.0	0.00164	0.0	89.1
63.9	1.5E+2	0.0	0.00163	0.0	89.1
64	1.5E+2	0.0	0.00162	0.0	89.1

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
64.1	$1.5E{+}2$	0.0	0.00162	0.0	89.11
64.2	$1.5E{+}2$	0.0	0.00161	0.0	89.11
64.3	$1.5E{+}2$	0.0	0.00161	0.0	89.11
64.4	$1.5E{+}2$	0.0	0.0016	0.0	89.11
64.5	$1.5E{+}2$	0.0	0.0016	0.0	89.11
64.6	$1.5E{+}2$	0.0	0.00159	0.0	89.11
64.7	$1.5E{+}2$	0.0	0.00159	0.0	89.11
64.8	$1.5E{+}2$	0.0	0.00159	0.0	89.12
64.9	$1.5E{+}2$	0.0	0.00158	0.0	89.12
65	$1.5E{+}2$	0.0	0.00158	0.0	89.12
65.1	$1.5E{+}2$	0.0	0.00157	0.0	89.12
65.2	$1.5E{+}2$	0.0	0.00157	0.0	89.12
65.3	$1.5E{+}2$	0.0	0.00156	0.0	89.12
65.4	$1.5E{+}2$	0.0	0.00156	0.0	89.12
65.5	$1.5E{+}2$	0.0	0.00155	0.0	89.13
65.6	$1.5E{+}2$	0.0	0.00155	0.0	89.13
65.7	$1.5E{+}2$	0.0	0.00154	0.0	89.13
65.8	$1.5E{+}2$	0.0	0.00154	0.0	89.13
65.9	$1.5E{+}2$	0.0	0.00153	0.0	89.13
66	$1.5E{+}2$	0.0	0.00153	0.0	89.13
66.1	$1.5E{+}2$	0.0	0.00152	0.0	89.13
66.2	$1.5E{+}2$	0.0	0.00152	0.0	89.13
66.3	$1.5E{+}2$	0.0	0.00151	0.0	89.14
66.4	$1.5E{+}2$	0.0	0.00151	0.0	89.14
66.5	$1.5E{+}2$	0.0	0.00151	0.0	89.14
66.6	$1.5E{+}2$	0.0	0.0015	0.0	89.14
66.7	$1.5E{+}2$	0.0	0.0015	0.0	89.14
66.8	$1.5E{+}2$	0.0	0.00149	0.0	89.14
66.9	$1.5E{+}2$	0.0	0.00149	0.0	89.14
67	$1.5E{+}2$	0.0	0.00148	0.0	89.14
67.1	$1.5E{+}2$	0.0	0.00148	0.0	89.15
67.2	$1.5E{+}2$	0.0	0.00147	0.0	89.15
67.3	$1.5E{+}2$	0.0	0.00147	0.0	89.15

Table 7.2: Prandtl-Meyer function for k=1.3 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
67.4	1.5E+2	0.0	0.00147	0.0	89.15
67.5	1.5E+2	0.0	0.00146	0.0	89.15
67.6	1.5E+2	0.0	0.00146	0.0	89.15
67.7	1.5E+2	0.0	0.00145	0.0	89.15
67.8	1.5E+2	0.0	0.00145	0.0	89.15
67.9	1.5E+2	0.0	0.00144	0.0	89.16
68	1.5E+2	0.0	0.00144	0.0	89.16
68.1	1.5E+2	0.0	0.00144	0.0	89.16
68.2	1.5E+2	0.0	0.00143	0.0	89.16
68.3	1.5E+2	0.0	0.00143	0.0	89.16
68.4	1.5E+2	0.0	0.00142	0.0	89.16
68.5	1.5E+2	0.0	0.00142	0.0	89.16
68.6	1.5E+2	0.0	0.00141	0.0	89.16
68.7	1.5E+2	0.0	0.00141	0.0	89.17
68.8	1.5E+2	0.0	0.00141	0.0	89.17
68.9	1.5E+2	0.0	0.0014	0.0	89.17
69	1.5E+2	0.0	0.0014	0.0	89.17
69.1	1.5E+2	0.0	0.00139	0.0	89.17
69.2	1.5E+2	0.0	0.00139	0.0	89.17
69.3	1.5E+2	0.0	0.00139	0.0	89.17
69.4	1.5E+2	0.0	0.00138	0.0	89.17
69.5	1.5E+2	0.0	0.00138	0.0	89.18
69.6	1.5E+2	0.0	0.00137	0.0	89.18
69.7	1.5E+2	0.0	0.00137	0.0	89.18
69.8	1.5E+2	0.0	0.00137	0.0	89.18
69.9	1.5E+2	0.0	0.00136	0.0	89.18
70	1.5E+2	0.0	0.00136	0.0	89.18

7.3 Prandtl-Meyer Function for k=1.4

Table 7.3: Prandtl-Meyer function for k=1.4

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
1	0.0	0.52828	0.83333	0.63394	45
1.01	0.044725	0.52213	0.83055	0.62866	45.29
1.02	0.12569	0.51602	0.82776	0.62339	45.57
1.03	0.22943	0.50994	0.82496	0.61813	45.85
1.04	0.35098	0.50389	0.82215	0.61289	46.12
1.05	0.48741	0.49787	0.81934	0.60765	46.4
1.06	0.63669	0.49189	0.81651	0.60243	46.67
1.07	0.79729	0.48595	0.81368	0.59722	46.94
1.08	0.96804	0.48005	0.81085	0.59203	47.2
1.09	1.148	0.47418	0.808	0.58686	47.47
1.1	1.336	0.46835	0.80515	0.5817	47.73
1.11	1.532	0.46257	0.8023	0.57655	47.98
1.12	1.735	0.45682	0.79944	0.57143	48.24
1.13	1.944	0.45111	0.79657	0.56632	48.49
1.14	2.16	0.44545	0.7937	0.56123	48.74
1.15	2.381	0.43983	0.79083	0.55616	48.99
1.16	2.607	0.43425	0.78795	0.55112	49.24
1.17	2.839	0.42872	0.78506	0.54609	49.48
1.18	3.074	0.42322	0.78218	0.54108	49.72
1.19	3.314	0.41778	0.77929	0.5361	49.96
1.2	3.558	0.41238	0.7764	0.53114	50.19
1.21	3.806	0.40702	0.7735	0.5262	50.43
1.22	4.057	0.40171	0.77061	0.52129	50.66
1.23	4.312	0.39645	0.76771	0.5164	50.89
1.24	4.569	0.39123	0.76481	0.51154	51.12
1.25	4.83	0.38606	0.7619	0.5067	51.34
1.26	5.093	0.38093	0.759	0.50189	51.56
1.27	5.359	0.37586	0.7561	0.4971	51.78
1.28	5.627	0.37083	0.75319	0.49234	52
1.29	5.898	0.36585	0.75029	0.48761	52.22
1.3	6.17	0.36091	0.74738	0.4829	52.43
1.31	6.445	0.35603	0.74448	0.47822	52.64
1.32	6.721	0.35119	0.74158	0.47357	52.85

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
1.33	7	0.3464	0.73867	0.46895	53.06
1.34	7.279	0.34166	0.73577	0.46436	53.27
1.35	7.561	0.33697	0.73287	0.4598	53.47
1.36	7.844	0.33233	0.72997	0.45526	53.67
1.37	8.128	0.32773	0.72707	0.45076	53.87
1.38	8.413	0.32319	0.72418	0.44628	54.07
1.39	8.699	0.31869	0.72128	0.44184	54.27
1.4	8.987	0.31424	0.71839	0.43742	54.46
1.41	9.276	0.30984	0.7155	0.43304	54.65
1.42	9.565	0.30549	0.71262	0.42869	54.85
1.43	9.855	0.30118	0.70973	0.42436	55.03
1.44	10.15	0.29693	0.70685	0.42007	55.22
1.45	10.44	0.29272	0.70398	0.41581	55.41
1.46	10.73	0.28856	0.7011	0.41158	55.59
1.47	11.02	0.28445	0.69824	0.40739	55.77
1.48	11.32	0.28039	0.69537	0.40322	55.95
1.49	11.61	0.27637	0.69251	0.39909	56.13
1.5	11.91	0.2724	0.68966	0.39498	56.31
1.51	12.2	0.26848	0.6868	0.39091	56.49
1.52	12.49	0.26461	0.68396	0.38688	56.66
1.53	12.79	0.26078	0.68112	0.38287	56.83
1.54	13.09	0.257	0.67828	0.3789	57
1.55	13.38	0.25326	0.67545	0.37495	57.17
1.56	13.68	0.24957	0.67262	0.37105	57.34
1.57	13.97	0.24593	0.6698	0.36717	57.51
1.58	14.27	0.24233	0.66699	0.36332	57.67
1.59	14.56	0.23878	0.66418	0.35951	57.83
1.6	14.86	0.23527	0.66138	0.35573	57.99
1.61	15.16	0.23181	0.65858	0.35198	58.15
1.62	15.45	0.22839	0.65579	0.34827	58.31
1.63	15.75	0.22501	0.65301	0.34458	58.47
1.64	16.04	0.22168	0.65023	0.34093	58.63
1.65	16.34	0.21839	0.64746	0.33731	58.78

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
1.66	16.63	0.21515	0.6447	0.33372	58.93
1.67	16.93	0.21195	0.64194	0.33017	59.09
1.68	17.22	0.20879	0.63919	0.32664	59.24
1.69	17.52	0.20567	0.63645	0.32315	59.39
1.7	17.81	0.20259	0.63371	0.31969	59.53
1.71	18.1	0.19956	0.63099	0.31626	59.68
1.72	18.4	0.19656	0.62827	0.31287	59.83
1.73	18.69	0.19361	0.62556	0.3095	59.97
1.74	18.98	0.1907	0.62285	0.30617	60.11
1.75	19.27	0.18782	0.62016	0.30287	60.26
1.76	19.56	0.18499	0.61747	0.29959	60.4
1.77	19.86	0.18219	0.61479	0.29635	60.53
1.78	20.15	0.17944	0.61211	0.29315	60.67
1.79	20.44	0.17672	0.60945	0.28997	60.81
1.8	20.73	0.17404	0.6068	0.28682	60.95
1.81	21.01	0.1714	0.60415	0.2837	61.08
1.82	21.3	0.16879	0.60151	0.28061	61.21
1.83	21.59	0.16622	0.59888	0.27756	61.35
1.84	21.88	0.16369	0.59626	0.27453	61.48
1.85	22.16	0.16119	0.59365	0.27153	61.61
1.86	22.45	0.15873	0.59104	0.26857	61.74
1.87	22.73	0.15631	0.58845	0.26563	61.86
1.88	23.02	0.15392	0.58586	0.26272	61.99
1.89	23.3	0.15156	0.58329	0.25984	62.12
1.9	23.59	0.14924	0.58072	0.25699	62.24
1.91	23.87	0.14695	0.57816	0.25417	62.37
1.92	24.15	0.1447	0.57561	0.25138	62.49
1.93	24.43	0.14247	0.57307	0.24861	62.61
1.94	24.71	0.14028	0.57054	0.24588	62.73
1.95	24.99	0.13813	0.56802	0.24317	62.85
1.96	25.27	0.136	0.56551	0.24049	62.97
1.97	25.55	0.1339	0.56301	0.23784	63.09
1.98	25.83	0.13184	0.56051	0.23521	63.2

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
1.99	26.1	0.12981	0.55803	0.23262	63.32
2	26.38	0.1278	0.55556	0.23005	63.43
2.02	26.93	0.12389	0.55064	0.22499	63.66
2.04	27.48	0.12009	0.54576	0.22004	63.89
2.06	28.02	0.1164	0.54091	0.21519	64.11
2.08	28.56	0.11282	0.53611	0.21045	64.32
2.1	29.1	0.10935	0.53135	0.2058	64.54
2.12	29.63	0.10599	0.52663	0.20126	64.75
2.14	30.16	0.10273	0.52194	0.19681	64.95
2.16	30.69	0.099562	0.5173	0.19247	65.16
2.18	31.21	0.096495	0.51269	0.18821	65.36
2.2	31.73	0.093522	0.50813	0.18405	65.56
2.22	32.25	0.09064	0.50361	0.17998	65.75
2.24	32.76	0.087846	0.49912	0.176	65.94
2.26	33.27	0.085139	0.49468	0.17211	66.13
2.28	33.78	0.082515	0.49027	0.1683	66.32
2.3	34.28	0.079973	0.48591	0.16458	66.5
2.32	34.78	0.077509	0.48158	0.16095	66.68
2.34	35.28	0.075122	0.4773	0.15739	66.86
2.36	35.77	0.07281	0.47305	0.15391	67.04
2.38	36.26	0.07057	0.46885	0.15052	67.21
2.4	36.75	0.068399	0.46468	0.1472	67.38
2.42	37.23	0.066297	0.46056	0.14395	67.55
2.44	37.71	0.064261	0.45647	0.14078	67.71
2.46	38.18	0.062288	0.45242	0.13768	67.88
2.48	38.66	0.060378	0.44841	0.13465	68.04
2.5	39.12	0.058528	0.44444	0.13169	68.2
2.52	39.59	0.056736	0.44051	0.12879	68.36
2.54	40.05	0.055	0.43662	0.12597	68.51
2.56	40.51	0.053319	0.43277	0.12321	68.66
2.58	40.96	0.051692	0.42895	0.12051	68.81
2.6	41.41	0.050115	0.42517	0.11787	68.96
2.62	41.86	0.048589	0.42143	0.1153	69.11

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
2.64	42.31	0.04711	0.41772	0.11278	69.25
2.66	42.75	0.045679	0.41406	0.11032	69.4
2.68	43.19	0.044292	0.41043	0.10792	69.54
2.7	43.62	0.04295	0.40683	0.10557	69.68
2.72	44.05	0.04165	0.40328	0.10328	69.81
2.74	44.48	0.040391	0.39976	0.10104	69.95
2.76	44.91	0.039172	0.39627	0.098851	70.08
2.78	45.33	0.037992	0.39282	0.096714	70.22
2.8	45.75	0.036848	0.38941	0.094626	70.35
2.82	46.16	0.035741	0.38603	0.092587	70.47
2.84	46.57	0.034669	0.38268	0.090594	70.6
2.86	46.98	0.033631	0.37937	0.088648	70.73
2.88	47.39	0.032625	0.3761	0.086747	70.85
2.9	47.79	0.031651	0.37286	0.084889	70.97
2.92	48.19	0.030708	0.36965	0.083075	71.1
2.94	48.59	0.029795	0.36647	0.081302	71.21
2.96	48.98	0.02891	0.36333	0.079571	71.33
2.98	49.37	0.028054	0.36022	0.077879	71.45
3	49.76	0.027224	0.35714	0.076226	71.57
3.02	50.14	0.02642	0.3541	0.074612	71.68
3.04	50.52	0.025641	0.35108	0.073034	71.79
3.06	50.9	0.024887	0.3481	0.071494	71.9
3.08	51.28	0.024156	0.34515	0.069988	72.01
3.1	51.65	0.023449	0.34223	0.068517	72.12
3.12	52.02	0.022763	0.33934	0.06708	72.23
3.14	52.39	0.022099	0.33648	0.065676	72.33
3.16	52.75	0.021455	0.33365	0.064304	72.44
3.18	53.11	0.020832	0.33085	0.062964	72.54
3.2	53.47	0.020228	0.32808	0.061654	72.65
3.22	53.83	0.019642	0.32534	0.060374	72.75
3.24	54.18	0.019075	0.32263	0.059124	72.85
3.26	54.53	0.018526	0.31995	0.057902	72.95
3.28	54.88	0.017993	0.31729	0.056708	73.04

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
3.3	55.22	0.017477	0.31466	0.055541	73.14
3.32	55.56	0.016977	0.31206	0.054401	73.24
3.34	55.9	0.016492	0.30949	0.053287	73.33
3.36	56.24	0.016022	0.30694	0.052197	73.43
3.38	56.58	0.015566	0.30443	0.051133	73.52
3.4	56.91	0.015125	0.30193	0.050093	73.61
3.42	57.24	0.014697	0.29947	0.049076	73.7
3.44	57.56	0.014282	0.29702	0.048082	73.79
3.46	57.89	0.013879	0.29461	0.047111	73.88
3.48	58.21	0.013489	0.29222	0.046161	73.97
3.5	58.53	0.013111	0.28986	0.045233	74.05
3.52	58.85	0.012744	0.28751	0.044325	74.14
3.54	59.16	0.012389	0.2852	0.043438	74.23
3.56	59.47	0.012044	0.28291	0.042571	74.31
3.58	59.78	0.011709	0.28064	0.041723	74.39
3.6	60.09	0.011385	0.2784	0.040894	74.48
3.62	60.4	0.01107	0.27618	0.040083	74.56
3.64	60.7	0.010765	0.27398	0.039291	74.64
3.66	61	0.010469	0.2718	0.038516	74.72
3.68	61.3	0.010182	0.26965	0.037758	74.8
3.7	61.6	0.0099	0.26752	0.037017	74.88
3.72	61.89	0.00963	0.26542	0.036292	74.95
3.74	62.18	0.00937	0.26333	0.035584	75.03
3.76	62.47	0.00912	0.26127	0.03489	75.11
3.78	62.76	0.00887	0.25922	0.034212	75.18
3.8	63.04	0.00863	0.2572	0.033549	75.26
3.82	63.33	0.0084	0.2552	0.032901	75.33
3.84	63.61	0.00817	0.25322	0.032266	75.4
3.86	63.89	0.00795	0.25126	0.031646	75.48
3.88	64.16	0.00774	0.24932	0.031039	75.55
3.9	64.44	0.00753	0.2474	0.030445	75.62
3.92	64.71	0.00733	0.2455	0.029863	75.69
3.94	64.98	0.00714	0.24362	0.029295	75.76

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
3.96	65.25	0.00695	0.24176	0.028739	75.83
3.98	65.52	0.00676	0.23992	0.028194	75.9
4	65.78	0.00659	0.2381	0.027662	75.96
4.02	66.05	0.00641	0.23629	0.02714	76.03
4.04	66.31	0.00624	0.2345	0.02663	76.1
4.06	66.57	0.00608	0.23274	0.026131	76.16
4.08	66.83	0.00592	0.23099	0.025643	76.23
4.1	67.08	0.00577	0.22925	0.025164	76.29
4.12	67.34	0.00562	0.22754	0.024696	76.36
4.14	67.59	0.00547	0.22584	0.024238	76.42
4.16	67.84	0.00533	0.22416	0.02379	76.48
4.18	68.09	0.0052	0.2225	0.023351	76.55
4.2	68.33	0.00506	0.22085	0.022921	76.61
4.22	68.58	0.00493	0.21922	0.0225	76.67
4.24	68.82	0.00481	0.2176	0.022088	76.73
4.26	69.06	0.00468	0.21601	0.021685	76.79
4.28	69.3	0.00457	0.21442	0.02129	76.85
4.3	69.54	0.00445	0.21286	0.020903	76.91
4.32	69.78	0.00434	0.21131	0.020525	76.97
4.34	70.01	0.00423	0.20977	0.020154	77.02
4.36	70.24	0.00412	0.20825	0.019791	77.08
4.38	70.48	0.00402	0.20674	0.019435	77.14
4.4	70.71	0.00392	0.20525	0.019087	77.2
4.42	70.93	0.00382	0.20378	0.018746	77.25
4.44	71.16	0.00372	0.20232	0.018411	77.31
4.46	71.39	0.00363	0.20087	0.018084	77.36
4.48	71.61	0.00354	0.19944	0.017763	77.42
4.5	71.83	0.00346	0.19802	0.017449	77.47
4.52	72.05	0.00337	0.19662	0.017141	77.52
4.54	72.27	0.00329	0.19522	0.01684	77.58
4.56	72.49	0.00321	0.19385	0.016544	77.63
4.58	72.7	0.00313	0.19248	0.016255	77.68
4.6	72.92	0.00305	0.19113	0.015971	77.74

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
4.62	73.13	0.00298	0.18979	0.015693	77.79
4.64	73.34	0.00291	0.18847	0.01542	77.84
4.66	73.55	0.00284	0.18716	0.015153	77.89
4.68	73.76	0.00277	0.18586	0.014892	77.94
4.7	73.97	0.0027	0.18457	0.014635	77.99
4.72	74.18	0.00264	0.1833	0.014384	78.04
4.74	74.38	0.00257	0.18203	0.014138	78.09
4.76	74.58	0.00251	0.18078	0.013896	78.14
4.78	74.79	0.00245	0.17954	0.013659	78.18
4.8	74.99	0.00239	0.17832	0.013427	78.23
4.82	75.19	0.00234	0.1771	0.013199	78.28
4.84	75.38	0.00228	0.1759	0.012976	78.33
4.86	75.58	0.00223	0.17471	0.012758	78.37
4.88	75.78	0.00218	0.17352	0.012543	78.42
4.9	75.97	0.00213	0.17235	0.012333	78.47
4.92	76.16	0.00208	0.1712	0.012126	78.51
4.94	76.35	0.00203	0.17005	0.011924	78.56
4.96	76.54	0.00198	0.16891	0.011726	78.6
4.98	76.73	0.00193	0.16778	0.011531	78.65
5	76.92	0.00189	0.16667	0.01134	78.69
5.04	77.29	0.0018	0.16447	0.010969	78.78
5.08	77.66	0.00172	0.1623	0.010613	78.86
5.12	78.02	0.00164	0.16018	0.010269	78.95
5.16	78.38	0.00157	0.1581	0.00994	79.03
5.2	78.73	0.0015	0.15605	0.00962	79.11
5.24	79.08	0.00143	0.15405	0.00931	79.2
5.28	79.43	0.00137	0.15208	0.00902	79.28
5.32	79.77	0.00131	0.15014	0.00873	79.35
5.36	80.1	0.00125	0.14824	0.00846	79.43
5.4	80.43	0.0012	0.14637	0.0082	79.51
5.44	80.76	0.00115	0.14454	0.00794	79.58
5.48	81.08	0.0011	0.14273	0.0077	79.66
5.52	81.4	0.00105	0.14096	0.00746	79.73

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
5.56	81.72	0.00101	0.13922	0.00723	79.8
5.6	82.03	0.000964	0.13751	0.00701	79.88
5.64	82.34	0.000924	0.13583	0.0068	79.95
5.68	82.64	0.000885	0.13418	0.0066	80.02
5.72	82.95	0.000848	0.13256	0.0064	80.08
5.76	83.24	0.000813	0.13097	0.00621	80.15
5.8	83.54	0.000779	0.1294	0.00602	80.22
5.84	83.83	0.000747	0.12786	0.00585	80.28
5.88	84.11	0.000717	0.12634	0.00567	80.35
5.92	84.4	0.000688	0.12486	0.00551	80.41
5.96	84.68	0.00066	0.12339	0.00535	80.48
6	84.96	0.000633	0.12195	0.00519	80.54
6.04	85.23	0.000608	0.12054	0.00504	80.6
6.08	85.5	0.000584	0.11914	0.0049	80.66
6.12	85.77	0.000561	0.11777	0.00476	80.72
6.16	86.03	0.000538	0.11643	0.00463	80.78
6.2	86.29	0.000517	0.1151	0.00449	80.84
6.24	86.55	0.000497	0.1138	0.00437	80.9
6.28	86.81	0.000478	0.11252	0.00425	80.95
6.32	87.06	0.000459	0.11125	0.00413	81.01
6.36	87.31	0.000442	0.11001	0.00401	81.06
6.4	87.56	0.000425	0.10879	0.0039	81.12
6.44	87.81	0.000408	0.10759	0.0038	81.17
6.48	88.05	0.000393	0.1064	0.00369	81.23
6.52	88.29	0.000378	0.10524	0.00359	81.28
6.56	88.52	0.000364	0.10409	0.0035	81.33
6.6	88.76	0.00035	0.10297	0.0034	81.38
6.64	88.99	0.000337	0.10185	0.00331	81.44
6.68	89.22	0.000325	0.10076	0.00322	81.49
6.72	89.45	0.000313	0.099684	0.00314	81.54
6.76	89.67	0.000301	0.098624	0.00305	81.59
6.8	89.89	0.00029	0.09758	0.00297	81.63
6.84	90.12	0.00028	0.096552	0.0029	81.68

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
6.88	90.33	0.00027	0.095539	0.00282	81.73
6.92	90.55	0.00026	0.094542	0.00275	81.78
6.96	90.76	0.000251	0.09356	0.00268	81.82
7	90.97	0.000242	0.092593	0.00261	81.87
7.04	91.18	0.000233	0.09164	0.00254	81.92
7.08	91.39	0.000225	0.090701	0.00248	81.96
7.12	91.59	0.000217	0.089776	0.00241	82.01
7.16	91.8	0.000209	0.088864	0.00235	82.05
7.2	92	0.000202	0.087966	0.0023	82.09
7.24	92.2	0.000195	0.087081	0.00224	82.14
7.28	92.39	0.000188	0.086209	0.00218	82.18
7.32	92.59	0.000182	0.08535	0.00213	82.22
7.36	92.78	0.000175	0.084503	0.00208	82.26
7.4	92.97	0.000169	0.083668	0.00202	82.3
7.44	93.16	0.000164	0.082845	0.00198	82.34
7.48	93.35	0.000158	0.082034	0.00193	82.39
7.52	93.53	0.000153	0.081234	0.00188	82.43
7.56	93.72	0.000148	0.080446	0.00184	82.46
7.6	93.9	0.000143	0.079669	0.00179	82.5
7.64	94.08	0.000138	0.078902	0.00175	82.54
7.68	94.26	0.000133	0.078146	0.00171	82.58
7.72	94.43	0.000129	0.077401	0.00167	82.62
7.76	94.61	0.000125	0.076666	0.00163	82.66
7.8	94.78	0.000121	0.075942	0.00159	82.69
7.84	94.95	0.000117	0.075227	0.00155	82.73
7.88	95.12	0.000113	0.074522	0.00152	82.77
7.92	95.29	0.000109	0.073826	0.00148	82.8
7.96	95.46	0.000106	0.07314	0.00145	82.84
8	95.62	0.000102	0.072464	0.00141	82.87
8.04	95.79	$9.92E{-}5$	0.071796	0.00138	82.91
8.08	95.95	$9.6E-5$	0.071138	0.00135	82.94
8.12	96.11	$9.3E-5$	0.070488	0.00132	82.98
8.16	96.27	$9.01E{-}5$	0.069846	0.00129	83.01

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
8.2	96.43	$8.72E{-}5$	0.069214	0.00126	83.05
8.24	96.59	$8.45E{-}5$	0.068589	0.00123	83.08
8.28	96.74	$8.19E{-}5$	0.067973	0.0012	83.11
8.32	96.9	$7.93E{-}5$	0.067365	0.00118	83.15
8.36	97.05	$7.69E{-}5$	0.066765	0.00115	83.18
8.4	97.2	$7.45E{-}5$	0.066173	0.00113	83.21
8.44	97.35	$7.23E{-}5$	0.065588	0.0011	83.24
8.48	97.5	$7.01E{-}5$	0.065011	0.00108	83.27
8.52	97.65	$6.79E{-}5$	0.064441	0.00105	83.31
8.56	97.79	$6.59E{-}5$	0.063878	0.00103	83.34
8.6	97.94	$6.39E{-}5$	0.063323	0.00101	83.37
8.64	98.08	$6.2E-5$	0.062775	0.000987	83.4
8.68	98.22	$6.01E{-}5$	0.062234	0.000966	83.43
8.72	98.36	$5.83E{-}5$	0.061699	0.000946	83.46
8.76	98.5	$5.66E{-}5$	0.061171	0.000925	83.49
8.8	98.64	$5.49E{-}5$	0.06065	0.000906	83.52
8.84	98.78	$5.33E{-}5$	0.060135	0.000887	83.55
8.88	98.92	$5.18E{-}5$	0.059627	0.000868	83.57
8.92	99.05	$5.03E{-}5$	0.059125	0.00085	83.6
8.96	99.19	$4.88E{-}5$	0.058629	0.000832	83.63
9	99.32	$4.74E{-}5$	0.05814	0.000815	83.66
9.04	99.45	$4.6E-5$	0.057656	0.000798	83.69
9.08	99.58	$4.47E{-}5$	0.057178	0.000782	83.72
9.12	99.71	$4.34E{-}5$	0.056706	0.000766	83.74
9.16	99.84	$4.22E{-}5$	0.056239	0.00075	83.77
9.2	99.97	$4.1E-5$	0.055779	0.000735	83.8
9.24	$1.0E{+}2$	$3.98E{-}5$	0.055323	0.00072	83.82
9.28	$1.0E{+}2$	$3.87E{-}5$	0.054874	0.000705	83.85
9.32	$1.0E{+}2$	$3.76E{-}5$	0.054429	0.000691	83.88
9.36	$1.0E{+}2$	$3.66E{-}5$	0.05399	0.000677	83.9
9.4	$1.0E{+}2$	$3.55E{-}5$	0.053556	0.000664	83.93
9.44	$1.0E{+}2$	$3.46E{-}5$	0.053127	0.000651	83.95
9.48	$1.0E{+}2$	$3.36E{-}5$	0.052703	0.000638	83.98

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
9.52	1.0E+2	3.27E−5	0.052285	0.000625	84
9.56	1.0E+2	3.18E−5	0.051871	0.000613	84.03
9.6	1.0E+2	3.09E−5	0.051462	0.000601	84.05
9.64	1.0E+2	3.01E−5	0.051057	0.000589	84.08
9.68	1.0E+2	2.93E−5	0.050657	0.000578	84.1
9.72	1.0E+2	2.85E−5	0.050262	0.000566	84.13
9.76	1.0E+2	2.77E−5	0.049872	0.000555	84.15
9.8	1.0E+2	2.7E − 5	0.049485	0.000545	84.17
9.84	1.0E+2	2.62E−5	0.049104	0.000534	84.2
9.88	1.0E+2	2.55E−5	0.048726	0.000524	84.22
9.92	1.0E+2	2.49E−5	0.048353	0.000514	84.24
9.96	1.0E+2	2.42E−5	0.047984	0.000504	84.27
10	1.0E+2	2.36E−5	0.047619	0.000495	84.29
10.1	1.0E+2	2.21E−5	0.046725	0.000472	84.35
10.2	1.0E+2	2.06E−5	0.045855	0.00045	84.4
10.3	1.0E+2	1.93E−5	0.045009	0.00043	84.45
10.4	1.0E+2	1.81E−5	0.044185	0.00041	84.51
10.5	1.0E+2	1.7E − 5	0.043384	0.000392	84.56
10.6	1.0E+2	1.6E − 5	0.042604	0.000375	84.61
10.7	1.0E+2	1.5E − 5	0.041845	0.000358	84.66
10.8	1.0E+2	1.41E−5	0.041105	0.000343	84.71
10.9	1.0E+2	1.32E−5	0.040384	0.000328	84.76
11	1.0E+2	1.24E−5	0.039683	0.000314	84.81
11.1	1.1E+2	1.17E−5	0.038999	0.0003	84.85
11.2	1.1E+2	1.1E − 5	0.038332	0.000288	84.9
11.3	1.1E+2	1.04E−5	0.037682	0.000276	84.94
11.4	1.1E+2	9.79E−6	0.037048	0.000264	84.99
11.5	1.1E+2	9.23E−6	0.03643	0.000253	85.03
11.6	1.1E+2	8.7E − 6	0.035827	0.000243	85.07
11.7	1.1E+2	8.21E−6	0.035239	0.000233	85.11
11.8	1.1E+2	7.76E−6	0.034664	0.000224	85.16
11.9	1.1E+2	7.33E−6	0.034104	0.000215	85.2
12	1.1E+2	6.92E−6	0.033557	0.000206	85.24

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
12.1	$1.1E{+}2$	$6.54E{-}6$	0.033023	0.000198	85.28
12.2	$1.1E{+}2$	$6.19E{-}6$	0.032501	0.00019	85.31
12.3	$1.1E{+}2$	$5.86E{-}6$	0.031992	0.000183	85.35
12.4	$1.1E{+}2$	$5.54E{-}6$	0.031494	0.000176	85.39
12.5	$1.1E{+}2$	$5.25E{-}6$	0.031008	0.000169	85.43
12.6	$1.1E{+}2$	$4.97E{-}6$	0.030532	0.000163	85.46
12.7	$1.1E{+}2$	$4.71E{-}6$	0.030068	0.000157	85.5
12.8	$1.1E{+}2$	$4.47E{-}6$	0.029614	0.000151	85.53
12.9	$1.1E{+}2$	$4.24E{-}6$	0.02917	0.000145	85.57
13	$1.1E{+}2$	$4.02E{-}6$	0.028736	0.00014	85.6
13.1	$1.1E{+}2$	$3.82E{-}6$	0.028311	0.000135	85.63
13.2	$1.1E{+}2$	$3.63E{-}6$	0.027896	0.00013	85.67
13.3	$1.1E{+}2$	$3.44E{-}6$	0.027489	0.000125	85.7
13.4	$1.1E{+}2$	$3.27E{-}6$	0.027091	0.000121	85.73
13.5	$1.1E{+}2$	$3.11E{-}6$	0.026702	0.000117	85.76
13.6	$1.1E{+}2$	$2.96E{-}6$	0.026321	0.000112	85.79
13.7	$1.1E{+}2$	$2.81E{-}6$	0.025948	0.000108	85.83
13.8	$1.1E{+}2$	$2.68E{-}6$	0.025583	0.000105	85.86
13.9	$1.1E{+}2$	$2.55E{-}6$	0.025226	0.000101	85.89
14	$1.1E{+}2$	$2.43E{-}6$	0.024876	$9.76E{-}5$	85.91
14.1	$1.1E{+}2$	$2.31E{-}6$	0.024533	$9.43E{-}5$	85.94
14.2	$1.1E{+}2$	$2.2E - 6$	0.024197	$9.11E{-}5$	85.97
14.3	$1.1E{+}2$	$2.1E - 6$	0.023867	$8.8E - 5$	86
14.4	$1.1E{+}2$	$2.0E - 6$	0.023545	$8.51E{-}5$	86.03
14.5	$1.1E{+}2$	$1.91E{-}6$	0.023229	$8.22E{-}5$	86.05
14.6	$1.1E{+}2$	$1.82E{-}6$	0.022919	$7.95E{-}5$	86.08
14.7	$1.1E{+}2$	$1.74E{-}6$	0.022615	$7.69E{-}5$	86.11
14.8	$1.1E{+}2$	$1.66E{-}6$	0.022317	$7.44E{-}5$	86.13
14.9	$1.1E{+}2$	$1.59E{-}6$	0.022025	$7.2E - 5$	86.16
15	$1.1E{+}2$	$1.51E{-}6$	0.021739	$6.97E{-}5$	86.19
15.1	$1.1E{+}2$	$1.45E{-}6$	0.021458	$6.75E{-}5$	86.21
15.2	$1.1E{+}2$	$1.38E{-}6$	0.021183	$6.53E{-}5$	86.24
15.3	$1.1E{+}2$	$1.32E{-}6$	0.020913	$6.32E{-}5$	86.26

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
15.4	$1.1E{+}2$	$1.26E{-}6$	0.020648	$6.13E{-}5$	86.28
15.5	$1.1E{+}2$	0.0	0.020387	$5.93E{-}5$	86.31
15.6	$1.1E{+}2$	0.0	0.020132	$5.75E{-}5$	86.33
15.7	$1.1E{+}2$	0.0	0.019882	$5.57E{-}5$	86.36
15.8	$1.1E{+}2$	0.0	0.019636	$5.4E-5$	86.38
15.9	$1.1E{+}2$	0.0	0.019394	$5.24E{-}5$	86.4
16	$1.1E{+}2$	0.0	0.019157	$5.08E{-}5$	86.42
16.1	$1.1E{+}2$	0.0	0.018924	$4.93E{-}5$	86.45
16.2	$1.1E{+}2$	0.0	0.018696	$4.78E{-}5$	86.47
16.3	$1.1E{+}2$	0.0	0.018471	$4.64E{-}5$	86.49
16.4	$1.1E{+}2$	0.0	0.018251	$4.5E-5$	86.51
16.5	$1.1E{+}2$	0.0	0.018034	$4.37E{-}5$	86.53
16.6	$1.1E{+}2$	0.0	0.017821	$4.24E{-}5$	86.55
16.7	$1.1E{+}2$	0.0	0.017612	$4.12E{-}5$	86.57
16.8	$1.1E{+}2$	0.0	0.017407	$4.0E-5$	86.59
16.9	$1.1E{+}2$	0.0	0.017205	$3.88E{-}5$	86.61
17	$1.1E{+}2$	0.0	0.017007	$3.77E{-}5$	86.63
17.1	$1.1E{+}2$	0.0	0.016812	$3.66E{-}5$	86.65
17.2	$1.1E{+}2$	0.0	0.01662	$3.56E{-}5$	86.67
17.3	$1.1E{+}2$	0.0	0.016432	$3.46E{-}5$	86.69
17.4	$1.1E{+}2$	0.0	0.016246	$3.36E{-}5$	86.71
17.5	$1.1E{+}2$	0.0	0.016064	$3.27E{-}5$	86.73
17.6	$1.1E{+}2$	0.0	0.015885	$3.18E{-}5$	86.75
17.7	$1.1E{+}2$	0.0	0.015709	$3.09E{-}5$	86.77
17.8	$1.1E{+}2$	0.0	0.015536	$3.01E{-}5$	86.78
17.9	$1.1E{+}2$	0.0	0.015365	$2.93E{-}5$	86.8
18	$1.1E{+}2$	0.0	0.015198	$2.85E{-}5$	86.82
18.1	$1.1E{+}2$	0.0	0.015033	$2.77E{-}5$	86.84
18.2	$1.1E{+}2$	0.0	0.01487	$2.7E-5$	86.86
18.3	$1.1E{+}2$	0.0	0.014711	$2.62E{-}5$	86.87
18.4	$1.1E{+}2$	0.0	0.014553	$2.56E{-}5$	86.89
18.5	$1.2E{+}2$	0.0	0.014399	$2.49E{-}5$	86.91
18.6	$1.2E{+}2$	0.0	0.014247	$2.42E{-}5$	86.92

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
18.7	$1.2E{+}2$	0.0	0.014097	$2.36E{-}5$	86.94
18.8	$1.2E{+}2$	0.0	0.013949	$2.3E-5$	86.96
18.9	$1.2E{+}2$	0.0	0.013804	$2.24E{-}5$	86.97
19	$1.2E{+}2$	0.0	0.013661	$2.18E{-}5$	86.99
19.1	$1.2E{+}2$	0.0	0.01352	$2.13E{-}5$	87
19.2	$1.2E{+}2$	0.0	0.013382	$2.07E{-}5$	87.02
19.3	$1.2E{+}2$	0.0	0.013245	$2.02E{-}5$	87.03
19.4	$1.2E{+}2$	0.0	0.013111	$1.97E{-}5$	87.05
19.5	$1.2E{+}2$	0.0	0.012979	$1.92E{-}5$	87.06
19.6	$1.2E{+}2$	0.0	0.012848	$1.87E{-}5$	87.08
19.7	$1.2E{+}2$	0.0	0.01272	$1.82E{-}5$	87.09
19.8	$1.2E{+}2$	0.0	0.012593	$1.78E{-}5$	87.11
19.9	$1.2E{+}2$	0.0	0.012469	$1.74E{-}5$	87.12
20	$1.2E{+}2$	0.0	0.012346	$1.69E{-}5$	87.14
20.1	$1.2E{+}2$	0.0	0.012225	$1.65E{-}5$	87.15
20.2	$1.2E{+}2$	0.0	0.012105	$1.61E{-}5$	87.17
20.3	$1.2E{+}2$	0.0	0.011988	$1.57E{-}5$	87.18
20.4	$1.2E{+}2$	0.0	0.011872	$1.54E{-}5$	87.19
20.5	$1.2E{+}2$	0.0	0.011758	$1.5E-5$	87.21
20.6	$1.2E{+}2$	0.0	0.011645	$1.46E{-}5$	87.22
20.7	$1.2E{+}2$	0.0	0.011534	$1.43E{-}5$	87.23
20.8	$1.2E{+}2$	0.0	0.011425	$1.4E-5$	87.25
20.9	$1.2E{+}2$	0.0	0.011317	$1.36E{-}5$	87.26
21	$1.2E{+}2$	0.0	0.011211	$1.33E{-}5$	87.27
21.1	$1.2E{+}2$	0.0	0.011106	$1.3E-5$	87.29
21.2	$1.2E{+}2$	0.0	0.011003	$1.27E{-}5$	87.3
21.3	$1.2E{+}2$	0.0	0.010901	$1.24E{-}5$	87.31
21.4	$1.2E{+}2$	0.0	0.0108	$1.21E{-}5$	87.32
21.5	$1.2E{+}2$	0.0	0.010701	$1.18E{-}5$	87.34
21.6	$1.2E{+}2$	0.0	0.010603	$1.16E{-}5$	87.35
21.7	$1.2E{+}2$	0.0	0.010507	$1.13E{-}5$	87.36
21.8	$1.2E{+}2$	0.0	0.010411	$1.11E{-}5$	87.37
21.9	$1.2E{+}2$	0.0	0.010318	$1.08E{-}5$	87.39

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
22	$1.2E{+}2$	0.0	0.010225	$1.06E{-}5$	87.4
22.1	$1.2E{+}2$	0.0	0.010134	$1.03E{-}5$	87.41
22.2	$1.2E{+}2$	0.0	0.010043	$1.01E{-}5$	87.42
22.3	$1.2E{+}2$	0.0	0.00995	$9.89E{-}6$	87.43
22.4	$1.2E{+}2$	0.0	0.00987	$9.67E{-}6$	87.44
22.5	$1.2E{+}2$	0.0	0.00978	$9.46E{-}6$	87.46
22.6	$1.2E{+}2$	0.0	0.00969	$9.25E{-}6$	87.47
22.7	$1.2E{+}2$	0.0	0.00961	$9.05E{-}6$	87.48
22.8	$1.2E{+}2$	0.0	0.00953	$8.86E{-}6$	87.49
22.9	$1.2E{+}2$	0.0	0.00944	$8.67E{-}6$	87.5
23	$1.2E{+}2$	0.0	0.00936	$8.48E{-}6$	87.51
23.1	$1.2E{+}2$	0.0	0.00928	$8.3E - 6$	87.52
23.2	$1.2E{+}2$	0.0	0.0092	$8.13E{-}6$	87.53
23.3	$1.2E{+}2$	0.0	0.00913	$7.96E{-}6$	87.54
23.4	$1.2E{+}2$	0.0	0.00905	$7.79E{-}6$	87.55
23.5	$1.2E{+}2$	0.0	0.00897	$7.63E{-}6$	87.56
23.6	$1.2E{+}2$	0.0	0.0089	$7.47E{-}6$	87.57
23.7	$1.2E{+}2$	0.0	0.00882	$7.31E{-}6$	87.58
23.8	$1.2E{+}2$	0.0	0.00875	$7.16E{-}6$	87.59
23.9	$1.2E{+}2$	0.0	0.00868	$7.01E{-}6$	87.6
24	$1.2E{+}2$	0.0	0.00861	$6.87E{-}6$	87.61
24.1	$1.2E{+}2$	0.0	0.00854	$6.73E{-}6$	87.62
24.2	$1.2E{+}2$	0.0	0.00847	$6.59E{-}6$	87.63
24.3	$1.2E{+}2$	0.0	0.0084	$6.46E{-}6$	87.64
24.4	$1.2E{+}2$	0.0	0.00833	$6.33E{-}6$	87.65
24.5	$1.2E{+}2$	0.0	0.00826	$6.2E - 6$	87.66
24.6	$1.2E{+}2$	0.0	0.00819	$6.08E{-}6$	87.67
24.7	$1.2E{+}2$	0.0	0.00813	$5.96E{-}6$	87.68
24.8	$1.2E{+}2$	0.0	0.00806	$5.84E{-}6$	87.69
24.9	$1.2E{+}2$	0.0	0.008	$5.72E{-}6$	87.7
25	$1.2E{+}2$	0.0	0.00794	$5.61E{-}6$	87.71
25.1	$1.2E{+}2$	0.0	0.00787	$5.5E - 6$	87.72
25.2	$1.2E{+}2$	0.0	0.00781	$5.39E{-}6$	87.73

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
25.3	$1.2E{+}2$	0.0	0.00775	$5.29E{-}6$	87.74
25.4	$1.2E{+}2$	0.0	0.00769	$5.19E{-}6$	87.75
25.5	$1.2E{+}2$	0.0	0.00763	$5.09E{-}6$	87.75
25.6	$1.2E{+}2$	0.0	0.00757	$4.99E{-}6$	87.76
25.7	$1.2E{+}2$	0.0	0.00751	$4.89E{-}6$	87.77
25.8	$1.2E{+}2$	0.0	0.00746	$4.8E-6$	87.78
25.9	$1.2E{+}2$	0.0	0.0074	$4.71E{-}6$	87.79
26	$1.2E{+}2$	0.0	0.00734	$4.62E{-}6$	87.8
26.1	$1.2E{+}2$	0.0	0.00729	$4.53E{-}6$	87.81
26.2	$1.2E{+}2$	0.0	0.00723	$4.45E{-}6$	87.81
26.3	$1.2E{+}2$	0.0	0.00718	$4.36E{-}6$	87.82
26.4	$1.2E{+}2$	0.0	0.00712	$4.28E{-}6$	87.83
26.5	$1.2E{+}2$	0.0	0.00707	$4.2E-6$	87.84
26.6	$1.2E{+}2$	0.0	0.00702	$4.12E{-}6$	87.85
26.7	$1.2E{+}2$	0.0	0.00696	$4.05E{-}6$	87.86
26.8	$1.2E{+}2$	0.0	0.00691	$3.97E{-}6$	87.86
26.9	$1.2E{+}2$	0.0	0.00686	$3.9E-6$	87.87
27	$1.2E{+}2$	0.0	0.00681	$3.83E{-}6$	87.88
27.1	$1.2E{+}2$	0.0	0.00676	$3.76E{-}6$	87.89
27.2	$1.2E{+}2$	0.0	0.00671	$3.69E{-}6$	87.89
27.3	$1.2E{+}2$	0.0	0.00666	$3.63E{-}6$	87.9
27.4	$1.2E{+}2$	0.0	0.00662	$3.56E{-}6$	87.91
27.5	$1.2E{+}2$	0.0	0.00657	$3.5E-6$	87.92
27.6	$1.2E{+}2$	0.0	0.00652	$3.43E{-}6$	87.92
27.7	$1.2E{+}2$	0.0	0.00647	$3.37E{-}6$	87.93
27.8	$1.2E{+}2$	0.0	0.00643	$3.31E{-}6$	87.94
27.9	$1.2E{+}2$	0.0	0.00638	$3.25E{-}6$	87.95
28	$1.2E{+}2$	0.0	0.00634	$3.2E-6$	87.95
28.1	$1.2E{+}2$	0.0	0.00629	$3.14E{-}6$	87.96
28.2	$1.2E{+}2$	0.0	0.00625	$3.09E{-}6$	87.97
28.3	$1.2E{+}2$	0.0	0.0062	$3.03E{-}6$	87.98
28.4	$1.2E{+}2$	0.0	0.00616	$2.98E{-}6$	87.98
28.5	$1.2E{+}2$	0.0	0.00612	$2.93E{-}6$	87.99

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
28.6	$1.2E{+}2$	0.0	0.00608	$2.88E{-}6$	88
28.7	$1.2E{+}2$	0.0	0.00603	$2.83E{-}6$	88
28.8	$1.2E{+}2$	0.0	0.00599	$2.78E{-}6$	88.01
28.9	$1.2E{+}2$	0.0	0.00595	$2.73E{-}6$	88.02
29	$1.2E{+}2$	0.0	0.00591	$2.69E{-}6$	88.03
29.1	$1.2E{+}2$	0.0	0.00587	$2.64E{-}6$	88.03
29.2	$1.2E{+}2$	0.0	0.00583	$2.6E-6$	88.04
29.3	$1.2E{+}2$	0.0	0.00579	$2.55E{-}6$	88.05
29.4	$1.2E{+}2$	0.0	0.00575	$2.51E{-}6$	88.05
29.5	$1.2E{+}2$	0.0	0.00571	$2.47E{-}6$	88.06
29.6	$1.2E{+}2$	0.0	0.00567	$2.43E{-}6$	88.07
29.7	$1.2E{+}2$	0.0	0.00564	$2.39E{-}6$	88.07
29.8	$1.2E{+}2$	0.0	0.0056	$2.35E{-}6$	88.08
29.9	$1.2E{+}2$	0.0	0.00556	$2.31E{-}6$	88.08
30	$1.2E{+}2$	0.0	0.00552	$2.27E{-}6$	88.09
30.1	$1.2E{+}2$	0.0	0.00549	$2.23E{-}6$	88.1
30.2	$1.2E{+}2$	0.0	0.00545	$2.2E-6$	88.1
30.3	$1.2E{+}2$	0.0	0.00542	$2.16E{-}6$	88.11
30.4	$1.2E{+}2$	0.0	0.00538	$2.12E{-}6$	88.12
30.5	$1.2E{+}2$	0.0	0.00535	$2.09E{-}6$	88.12
30.6	$1.2E{+}2$	0.0	0.00531	$2.06E{-}6$	88.13
30.7	$1.2E{+}2$	0.0	0.00528	$2.02E{-}6$	88.13
30.8	$1.2E{+}2$	0.0	0.00524	$1.99E{-}6$	88.14
30.9	$1.2E{+}2$	0.0	0.00521	$1.96E{-}6$	88.15
31	$1.2E{+}2$	0.0	0.00518	$1.93E{-}6$	88.15
31.1	$1.2E{+}2$	0.0	0.00514	$1.9E-6$	88.16
31.2	$1.2E{+}2$	0.0	0.00511	$1.87E{-}6$	88.16
31.3	$1.2E{+}2$	0.0	0.00508	$1.84E{-}6$	88.17
31.4	$1.2E{+}2$	0.0	0.00505	$1.81E{-}6$	88.18
31.5	$1.2E{+}2$	0.0	0.00501	$1.78E{-}6$	88.18
31.6	$1.2E{+}2$	0.0	0.00498	$1.75E{-}6$	88.19
31.7	$1.2E{+}2$	0.0	0.00495	$1.72E{-}6$	88.19
31.8	$1.2E{+}2$	0.0	0.00492	$1.7E-6$	88.2

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
31.9	$1.2E{+}2$	0.0	0.00489	$1.67E{-}6$	88.2
32	$1.2E{+}2$	0.0	0.00486	$1.65E{-}6$	88.21
32.1	$1.2E{+}2$	0.0	0.00483	$1.62E{-}6$	88.22
32.2	$1.2E{+}2$	0.0	0.0048	$1.6E-6$	88.22
32.3	$1.2E{+}2$	0.0	0.00477	$1.57E{-}6$	88.23
32.4	$1.2E{+}2$	0.0	0.00474	$1.55E{-}6$	88.23
32.5	$1.2E{+}2$	0.0	0.00471	$1.52E{-}6$	88.24
32.6	$1.2E{+}2$	0.0	0.00468	$1.5E-6$	88.24
32.7	$1.2E{+}2$	0.0	0.00465	$1.48E{-}6$	88.25
32.8	$1.2E{+}2$	0.0	0.00463	$1.46E{-}6$	88.25
32.9	$1.2E{+}2$	0.0	0.0046	$1.43E{-}6$	88.26
33	$1.2E{+}2$	0.0	0.00457	$1.41E{-}6$	88.26
33.1	$1.2E{+}2$	0.0	0.00454	$1.39E{-}6$	88.27
33.2	$1.2E{+}2$	0.0	0.00452	$1.37E{-}6$	88.27
33.3	$1.2E{+}2$	0.0	0.00449	$1.35E{-}6$	88.28
33.4	$1.2E{+}2$	0.0	0.00446	$1.33E{-}6$	88.29
33.5	$1.2E{+}2$	0.0	0.00444	$1.31E{-}6$	88.29
33.6	$1.2E{+}2$	0.0	0.00441	$1.29E{-}6$	88.3
33.7	$1.2E{+}2$	0.0	0.00438	$1.27E{-}6$	88.3
33.8	$1.2E{+}2$	0.0	0.00436	$1.25E{-}6$	88.31
33.9	$1.2E{+}2$	0.0	0.00433	0.0	88.31
34	$1.2E{+}2$	0.0	0.00431	0.0	88.32
34.1	$1.2E{+}2$	0.0	0.00428	0.0	88.32
34.2	$1.2E{+}2$	0.0	0.00426	0.0	88.33
34.3	$1.2E{+}2$	0.0	0.00423	0.0	88.33
34.4	$1.2E{+}2$	0.0	0.00421	0.0	88.33
34.5	$1.2E{+}2$	0.0	0.00418	0.0	88.34
34.6	$1.2E{+}2$	0.0	0.00416	0.0	88.34
34.7	$1.2E{+}2$	0.0	0.00414	0.0	88.35
34.8	$1.2E{+}2$	0.0	0.00411	0.0	88.35
34.9	$1.2E{+}2$	0.0	0.00409	0.0	88.36
35	$1.2E{+}2$	0.0	0.00407	0.0	88.36
35.1	$1.2E{+}2$	0.0	0.00404	0.0	88.37

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
35.2	1.2E+2	0.0	0.00402	0.0	88.37
35.3	1.2E+2	0.0	0.004	0.0	88.38
35.4	1.2E+2	0.0	0.00397	0.0	88.38
35.5	1.2E+2	0.0	0.00395	0.0	88.39
35.6	1.2E+2	0.0	0.00393	0.0	88.39
35.7	1.2E+2	0.0	0.00391	0.0	88.4
35.8	1.2E+2	0.0	0.00389	0.0	88.4
35.9	1.2E+2	0.0	0.00386	0.0	88.4
36	1.2E+2	0.0	0.00384	0.0	88.41
36.1	1.2E+2	0.0	0.00382	0.0	88.41
36.2	1.2E+2	0.0	0.0038	0.0	88.42
36.3	1.2E+2	0.0	0.00378	0.0	88.42
36.4	1.2E+2	0.0	0.00376	0.0	88.43
36.5	1.2E+2	0.0	0.00374	0.0	88.43
36.6	1.2E+2	0.0	0.00372	0.0	88.43
36.7	1.2E+2	0.0	0.0037	0.0	88.44
36.8	1.2E+2	0.0	0.00368	0.0	88.44
36.9	1.2E+2	0.0	0.00366	0.0	88.45
37	1.2E+2	0.0	0.00364	0.0	88.45
37.1	1.2E+2	0.0	0.00362	0.0	88.46
37.2	1.2E+2	0.0	0.0036	0.0	88.46
37.3	1.2E+2	0.0	0.00358	0.0	88.46
37.4	1.2E+2	0.0	0.00356	0.0	88.47
37.5	1.2E+2	0.0	0.00354	0.0	88.47
37.6	1.2E+2	0.0	0.00352	0.0	88.48
37.7	1.2E+2	0.0	0.00351	0.0	88.48
37.8	1.2E+2	0.0	0.00349	0.0	88.48
37.9	1.2E+2	0.0	0.00347	0.0	88.49
38	1.2E+2	0.0	0.00345	0.0	88.49
38.1	1.2E+2	0.0	0.00343	0.0	88.5
38.2	1.2E+2	0.0	0.00341	0.0	88.5
38.3	1.2E+2	0.0	0.0034	0.0	88.5
38.4	1.2E+2	0.0	0.00338	0.0	88.51

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
38.5	$1.2E{+}2$	0.0	0.00336	0.0	88.51
38.6	$1.2E{+}2$	0.0	0.00334	0.0	88.52
38.7	$1.2E{+}2$	0.0	0.00333	0.0	88.52
38.8	$1.2E{+}2$	0.0	0.00331	0.0	88.52
38.9	$1.2E{+}2$	0.0	0.00329	0.0	88.53
39	$1.2E{+}2$	0.0	0.00328	0.0	88.53
39.1	$1.2E{+}2$	0.0	0.00326	0.0	88.53
39.2	$1.2E{+}2$	0.0	0.00324	0.0	88.54
39.3	$1.2E{+}2$	0.0	0.00323	0.0	88.54
39.4	$1.2E{+}2$	0.0	0.00321	0.0	88.55
39.5	$1.2E{+}2$	0.0	0.00319	0.0	88.55
39.6	$1.2E{+}2$	0.0	0.00318	0.0	88.55
39.7	$1.2E{+}2$	0.0	0.00316	0.0	88.56
39.8	$1.2E{+}2$	0.0	0.00315	0.0	88.56
39.9	$1.2E{+}2$	0.0	0.00313	0.0	88.56
40	$1.2E{+}2$	0.0	0.00312	0.0	88.57
40.1	$1.2E{+}2$	0.0	0.0031	0.0	88.57
40.2	$1.2E{+}2$	0.0	0.00308	0.0	88.58
40.3	$1.2E{+}2$	0.0	0.00307	0.0	88.58
40.4	$1.2E{+}2$	0.0	0.00305	0.0	88.58
40.5	$1.2E{+}2$	0.0	0.00304	0.0	88.59
40.6	$1.2E{+}2$	0.0	0.00302	0.0	88.59
40.7	$1.2E{+}2$	0.0	0.00301	0.0	88.59
40.8	$1.2E{+}2$	0.0	0.00299	0.0	88.6
40.9	$1.2E{+}2$	0.0	0.00298	0.0	88.6
41	$1.2E{+}2$	0.0	0.00297	0.0	88.6
41.1	$1.2E{+}2$	0.0	0.00295	0.0	88.61
41.2	$1.2E{+}2$	0.0	0.00294	0.0	88.61
41.3	$1.2E{+}2$	0.0	0.00292	0.0	88.61
41.4	$1.2E{+}2$	0.0	0.00291	0.0	88.62
41.5	$1.2E{+}2$	0.0	0.00289	0.0	88.62
41.6	$1.2E{+}2$	0.0	0.00288	0.0	88.62
41.7	$1.2E{+}2$	0.0	0.00287	0.0	88.63

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
41.8	1.2E+2	0.0	0.00285	0.0	88.63
41.9	1.2E+2	0.0	0.00284	0.0	88.63
42	1.2E+2	0.0	0.00283	0.0	88.64
42.1	1.2E+2	0.0	0.00281	0.0	88.64
42.2	1.2E+2	0.0	0.0028	0.0	88.64
42.3	1.2E+2	0.0	0.00279	0.0	88.65
42.4	1.2E+2	0.0	0.00277	0.0	88.65
42.5	1.2E+2	0.0	0.00276	0.0	88.65
42.6	1.2E+2	0.0	0.00275	0.0	88.66
42.7	1.2E+2	0.0	0.00273	0.0	88.66
42.8	1.2E+2	0.0	0.00272	0.0	88.66
42.9	1.2E+2	0.0	0.00271	0.0	88.66
43	1.2E+2	0.0	0.0027	0.0	88.67
43.1	1.2E+2	0.0	0.00268	0.0	88.67
43.2	1.2E+2	0.0	0.00267	0.0	88.67
43.3	1.2E+2	0.0	0.00266	0.0	88.68
43.4	1.2E+2	0.0	0.00265	0.0	88.68
43.5	1.2E+2	0.0	0.00264	0.0	88.68
43.6	1.2E+2	0.0	0.00262	0.0	88.69
43.7	1.2E+2	0.0	0.00261	0.0	88.69
43.8	1.2E+2	0.0	0.0026	0.0	88.69
43.9	1.2E+2	0.0	0.00259	0.0	88.7
44	1.2E+2	0.0	0.00258	0.0	88.7
44.1	1.2E+2	0.0	0.00256	0.0	88.7
44.2	1.2E+2	0.0	0.00255	0.0	88.7
44.3	1.2E+2	0.0	0.00254	0.0	88.71
44.4	1.2E+2	0.0	0.00253	0.0	88.71
44.5	1.2E+2	0.0	0.00252	0.0	88.71
44.6	1.2E+2	0.0	0.00251	0.0	88.72
44.7	1.2E+2	0.0	0.0025	0.0	88.72
44.8	1.2E+2	0.0	0.00249	0.0	88.72
44.9	1.2E+2	0.0	0.00247	0.0	88.72
45	1.2E+2	0.0	0.00246	0.0	88.73

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
45.1	1.2E+2	0.0	0.00245	0.0	88.73
45.2	1.2E+2	0.0	0.00244	0.0	88.73
45.3	1.2E+2	0.0	0.00243	0.0	88.74
45.4	1.2E+2	0.0	0.00242	0.0	88.74
45.5	1.2E+2	0.0	0.00241	0.0	88.74
45.6	1.2E+2	0.0	0.0024	0.0	88.74
45.7	1.2E+2	0.0	0.00239	0.0	88.75
45.8	1.2E+2	0.0	0.00238	0.0	88.75
45.9	1.2E+2	0.0	0.00237	0.0	88.75
46	1.2E+2	0.0	0.00236	0.0	88.75
46.1	1.2E+2	0.0	0.00235	0.0	88.76
46.2	1.2E+2	0.0	0.00234	0.0	88.76
46.3	1.2E+2	0.0	0.00233	0.0	88.76
46.4	1.2E+2	0.0	0.00232	0.0	88.77
46.5	1.2E+2	0.0	0.00231	0.0	88.77
46.6	1.2E+2	0.0	0.0023	0.0	88.77
46.7	1.2E+2	0.0	0.00229	0.0	88.77
46.8	1.2E+2	0.0	0.00228	0.0	88.78
46.9	1.2E+2	0.0	0.00227	0.0	88.78
47	1.2E+2	0.0	0.00226	0.0	88.78
47.1	1.2E+2	0.0	0.00225	0.0	88.78
47.2	1.2E+2	0.0	0.00224	0.0	88.79
47.3	1.2E+2	0.0	0.00223	0.0	88.79
47.4	1.2E+2	0.0	0.00222	0.0	88.79
47.5	1.2E+2	0.0	0.00221	0.0	88.79
47.6	1.2E+2	0.0	0.0022	0.0	88.8
47.7	1.2E+2	0.0	0.00219	0.0	88.8
47.8	1.2E+2	0.0	0.00218	0.0	88.8
47.9	1.2E+2	0.0	0.00217	0.0	88.8
48	1.2E+2	0.0	0.00217	0.0	88.81
48.1	1.2E+2	0.0	0.00216	0.0	88.81
48.2	1.2E+2	0.0	0.00215	0.0	88.81
48.3	1.2E+2	0.0	0.00214	0.0	88.81

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
48.4	$1.2E{+}2$	0.0	0.00213	0.0	88.82
48.5	$1.2E{+}2$	0.0	0.00212	0.0	88.82
48.6	$1.2E{+}2$	0.0	0.00211	0.0	88.82
48.7	$1.2E{+}2$	0.0	0.0021	0.0	88.82
48.8	$1.2E{+}2$	0.0	0.0021	0.0	88.83
48.9	$1.2E{+}2$	0.0	0.00209	0.0	88.83
49	$1.2E{+}2$	0.0	0.00208	0.0	88.83
49.1	$1.2E{+}2$	0.0	0.00207	0.0	88.83
49.2	$1.2E{+}2$	0.0	0.00206	0.0	88.84
49.3	$1.2E{+}2$	0.0	0.00205	0.0	88.84
49.4	$1.2E{+}2$	0.0	0.00204	0.0	88.84
49.5	$1.2E{+}2$	0.0	0.00204	0.0	88.84
49.6	$1.2E{+}2$	0.0	0.00203	0.0	88.84
49.7	$1.2E{+}2$	0.0	0.00202	0.0	88.85
49.8	$1.2E{+}2$	0.0	0.00201	0.0	88.85
49.9	$1.2E{+}2$	0.0	0.002	0.0	88.85
50	$1.2E{+}2$	0.0	0.002	0.0	88.85
50.1	$1.2E{+}2$	0.0	0.00199	0.0	88.86
50.2	$1.2E{+}2$	0.0	0.00198	0.0	88.86
50.3	$1.2E{+}2$	0.0	0.00197	0.0	88.86
50.4	$1.2E{+}2$	0.0	0.00196	0.0	88.86
50.5	$1.2E{+}2$	0.0	0.00196	0.0	88.87
50.6	$1.2E{+}2$	0.0	0.00195	0.0	88.87
50.7	$1.2E{+}2$	0.0	0.00194	0.0	88.87
50.8	$1.2E{+}2$	0.0	0.00193	0.0	88.87
50.9	$1.2E{+}2$	0.0	0.00193	0.0	88.87
51	$1.2E{+}2$	0.0	0.00192	0.0	88.88
51.1	$1.2E{+}2$	0.0	0.00191	0.0	88.88
51.2	$1.2E{+}2$	0.0	0.0019	0.0	88.88
51.3	$1.2E{+}2$	0.0	0.0019	0.0	88.88
51.4	$1.2E{+}2$	0.0	0.00189	0.0	88.89
51.5	$1.2E{+}2$	0.0	0.00188	0.0	88.89
51.6	$1.2E{+}2$	0.0	0.00187	0.0	88.89

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
51.7	1.2E+2	0.0	0.00187	0.0	88.89
51.8	1.2E+2	0.0	0.00186	0.0	88.89
51.9	1.2E+2	0.0	0.00185	0.0	88.9
52	1.2E+2	0.0	0.00185	0.0	88.9
52.1	1.2E+2	0.0	0.00184	0.0	88.9
52.2	1.2E+2	0.0	0.00183	0.0	88.9
52.3	1.2E+2	0.0	0.00182	0.0	88.9
52.4	1.2E+2	0.0	0.00182	0.0	88.91
52.5	1.3E+2	0.0	0.00181	0.0	88.91
52.6	1.3E+2	0.0	0.0018	0.0	88.91
52.7	1.3E+2	0.0	0.0018	0.0	88.91
52.8	1.3E+2	0.0	0.00179	0.0	88.91
52.9	1.3E+2	0.0	0.00178	0.0	88.92
53	1.3E+2	0.0	0.00178	0.0	88.92
53.1	1.3E+2	0.0	0.00177	0.0	88.92
53.2	1.3E+2	0.0	0.00176	0.0	88.92
53.3	1.3E+2	0.0	0.00176	0.0	88.93
53.4	1.3E+2	0.0	0.00175	0.0	88.93
53.5	1.3E+2	0.0	0.00174	0.0	88.93
53.6	1.3E+2	0.0	0.00174	0.0	88.93
53.7	1.3E+2	0.0	0.00173	0.0	88.93
53.8	1.3E+2	0.0	0.00172	0.0	88.94
53.9	1.3E+2	0.0	0.00172	0.0	88.94
54	1.3E+2	0.0	0.00171	0.0	88.94
54.1	1.3E+2	0.0	0.00171	0.0	88.94
54.2	1.3E+2	0.0	0.0017	0.0	88.94
54.3	1.3E+2	0.0	0.00169	0.0	88.94
54.4	1.3E+2	0.0	0.00169	0.0	88.95
54.5	1.3E+2	0.0	0.00168	0.0	88.95
54.6	1.3E+2	0.0	0.00167	0.0	88.95
54.7	1.3E+2	0.0	0.00167	0.0	88.95
54.8	1.3E+2	0.0	0.00166	0.0	88.95
54.9	1.3E+2	0.0	0.00166	0.0	88.96

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
55	$1.3E{+}2$	0.0	0.00165	0.0	88.96
55.1	$1.3E{+}2$	0.0	0.00164	0.0	88.96
55.2	$1.3E{+}2$	0.0	0.00164	0.0	88.96
55.3	$1.3E{+}2$	0.0	0.00163	0.0	88.96
55.4	$1.3E{+}2$	0.0	0.00163	0.0	88.97
55.5	$1.3E{+}2$	0.0	0.00162	0.0	88.97
55.6	$1.3E{+}2$	0.0	0.00161	0.0	88.97
55.7	$1.3E{+}2$	0.0	0.00161	0.0	88.97
55.8	$1.3E{+}2$	0.0	0.0016	0.0	88.97
55.9	$1.3E{+}2$	0.0	0.0016	0.0	88.98
56	$1.3E{+}2$	0.0	0.00159	0.0	88.98
56.1	$1.3E{+}2$	0.0	0.00159	0.0	88.98
56.2	$1.3E{+}2$	0.0	0.00158	0.0	88.98
56.3	$1.3E{+}2$	0.0	0.00157	0.0	88.98
56.4	$1.3E{+}2$	0.0	0.00157	0.0	88.98
56.5	$1.3E{+}2$	0.0	0.00156	0.0	88.99
56.6	$1.3E{+}2$	0.0	0.00156	0.0	88.99
56.7	$1.3E{+}2$	0.0	0.00155	0.0	88.99
56.8	$1.3E{+}2$	0.0	0.00155	0.0	88.99
56.9	$1.3E{+}2$	0.0	0.00154	0.0	88.99
57	$1.3E{+}2$	0.0	0.00154	0.0	88.99
57.1	$1.3E{+}2$	0.0	0.00153	0.0	89
57.2	$1.3E{+}2$	0.0	0.00153	0.0	89
57.3	$1.3E{+}2$	0.0	0.00152	0.0	89
57.4	$1.3E{+}2$	0.0	0.00152	0.0	89
57.5	$1.3E{+}2$	0.0	0.00151	0.0	89
57.6	$1.3E{+}2$	0.0	0.0015	0.0	89.01
57.7	$1.3E{+}2$	0.0	0.0015	0.0	89.01
57.8	$1.3E{+}2$	0.0	0.00149	0.0	89.01
57.9	$1.3E{+}2$	0.0	0.00149	0.0	89.01
58	$1.3E{+}2$	0.0	0.00148	0.0	89.01
58.1	$1.3E{+}2$	0.0	0.00148	0.0	89.01
58.2	$1.3E{+}2$	0.0	0.00147	0.0	89.02

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
58.3	$1.3E+2$	0.0	0.00147	0.0	89.02
58.4	$1.3E+2$	0.0	0.00146	0.0	89.02
58.5	$1.3E+2$	0.0	0.00146	0.0	89.02
58.6	$1.3E+2$	0.0	0.00145	0.0	89.02
58.7	$1.3E+2$	0.0	0.00145	0.0	89.02
58.8	$1.3E+2$	0.0	0.00144	0.0	89.03
58.9	$1.3E+2$	0.0	0.00144	0.0	89.03
59	$1.3E+2$	0.0	0.00143	0.0	89.03
59.1	$1.3E+2$	0.0	0.00143	0.0	89.03
59.2	$1.3E+2$	0.0	0.00142	0.0	89.03
59.3	$1.3E+2$	0.0	0.00142	0.0	89.03
59.4	$1.3E+2$	0.0	0.00142	0.0	89.04
59.5	$1.3E+2$	0.0	0.00141	0.0	89.04
59.6	$1.3E+2$	0.0	0.00141	0.0	89.04
59.7	$1.3E+2$	0.0	0.0014	0.0	89.04
59.8	$1.3E+2$	0.0	0.0014	0.0	89.04
59.9	$1.3E+2$	0.0	0.00139	0.0	89.04
60	$1.3E+2$	0.0	0.00139	0.0	89.05
60.1	$1.3E+2$	0.0	0.00138	0.0	89.05
60.2	$1.3E+2$	0.0	0.00138	0.0	89.05
60.3	$1.3E+2$	0.0	0.00137	0.0	89.05
60.4	$1.3E+2$	0.0	0.00137	0.0	89.05
60.5	$1.3E+2$	0.0	0.00136	0.0	89.05
60.6	$1.3E+2$	0.0	0.00136	0.0	89.05
60.7	$1.3E+2$	0.0	0.00136	0.0	89.06
60.8	$1.3E+2$	0.0	0.00135	0.0	89.06
60.9	$1.3E+2$	0.0	0.00135	0.0	89.06
61	$1.3E+2$	0.0	0.00134	0.0	89.06
61.1	$1.3E+2$	0.0	0.00134	0.0	89.06
61.2	$1.3E+2$	0.0	0.00133	0.0	89.06
61.3	$1.3E+2$	0.0	0.00133	0.0	89.07
61.4	$1.3E+2$	0.0	0.00132	0.0	89.07
61.5	$1.3E+2$	0.0	0.00132	0.0	89.07

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
61.6	$1.3E{+}2$	0.0	0.00132	0.0	89.07
61.7	$1.3E{+}2$	0.0	0.00131	0.0	89.07
61.8	$1.3E{+}2$	0.0	0.00131	0.0	89.07
61.9	$1.3E{+}2$	0.0	0.0013	0.0	89.07
62	$1.3E{+}2$	0.0	0.0013	0.0	89.08
62.1	$1.3E{+}2$	0.0	0.00129	0.0	89.08
62.2	$1.3E{+}2$	0.0	0.00129	0.0	89.08
62.3	$1.3E{+}2$	0.0	0.00129	0.0	89.08
62.4	$1.3E{+}2$	0.0	0.00128	0.0	89.08
62.5	$1.3E{+}2$	0.0	0.00128	0.0	89.08
62.6	$1.3E{+}2$	0.0	0.00127	0.0	89.08
62.7	$1.3E{+}2$	0.0	0.00127	0.0	89.09
62.8	$1.3E{+}2$	0.0	0.00127	0.0	89.09
62.9	$1.3E{+}2$	0.0	0.00126	0.0	89.09
63	$1.3E{+}2$	0.0	0.00126	0.0	89.09
63.1	$1.3E{+}2$	0.0	0.00125	0.0	89.09
63.2	$1.3E{+}2$	0.0	0.00125	0.0	89.09
63.3	$1.3E{+}2$	0.0	0.00125	0.0	89.09
63.4	$1.3E{+}2$	0.0	0.00124	0.0	89.1
63.5	$1.3E{+}2$	0.0	0.00124	0.0	89.1
63.6	$1.3E{+}2$	0.0	0.00123	0.0	89.1
63.7	$1.3E{+}2$	0.0	0.00123	0.0	89.1
63.8	$1.3E{+}2$	0.0	0.00123	0.0	89.1
63.9	$1.3E{+}2$	0.0	0.00122	0.0	89.1
64	$1.3E{+}2$	0.0	0.00122	0.0	89.1
64.1	$1.3E{+}2$	0.0	0.00122	0.0	89.11
64.2	$1.3E{+}2$	0.0	0.00121	0.0	89.11
64.3	$1.3E{+}2$	0.0	0.00121	0.0	89.11
64.4	$1.3E{+}2$	0.0	0.0012	0.0	89.11
64.5	$1.3E{+}2$	0.0	0.0012	0.0	89.11
64.6	$1.3E{+}2$	0.0	0.0012	0.0	89.11
64.7	$1.3E{+}2$	0.0	0.00119	0.0	89.11
64.8	$1.3E{+}2$	0.0	0.00119	0.0	89.12

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
64.9	$1.3E{+}2$	0.0	0.00119	0.0	89.12
65	$1.3E{+}2$	0.0	0.00118	0.0	89.12
65.1	$1.3E{+}2$	0.0	0.00118	0.0	89.12
65.2	$1.3E{+}2$	0.0	0.00117	0.0	89.12
65.3	$1.3E{+}2$	0.0	0.00117	0.0	89.12
65.4	$1.3E{+}2$	0.0	0.00117	0.0	89.12
65.5	$1.3E{+}2$	0.0	0.00116	0.0	89.13
65.6	$1.3E{+}2$	0.0	0.00116	0.0	89.13
65.7	$1.3E{+}2$	0.0	0.00116	0.0	89.13
65.8	$1.3E{+}2$	0.0	0.00115	0.0	89.13
65.9	$1.3E{+}2$	0.0	0.00115	0.0	89.13
66	$1.3E{+}2$	0.0	0.00115	0.0	89.13
66.1	$1.3E{+}2$	0.0	0.00114	0.0	89.13
66.2	$1.3E{+}2$	0.0	0.00114	0.0	89.13
66.3	$1.3E{+}2$	0.0	0.00114	0.0	89.14
66.4	$1.3E{+}2$	0.0	0.00113	0.0	89.14
66.5	$1.3E{+}2$	0.0	0.00113	0.0	89.14
66.6	$1.3E{+}2$	0.0	0.00113	0.0	89.14
66.7	$1.3E{+}2$	0.0	0.00112	0.0	89.14
66.8	$1.3E{+}2$	0.0	0.00112	0.0	89.14
66.9	$1.3E{+}2$	0.0	0.00112	0.0	89.14
67	$1.3E{+}2$	0.0	0.00111	0.0	89.14
67.1	$1.3E{+}2$	0.0	0.00111	0.0	89.15
67.2	$1.3E{+}2$	0.0	0.00111	0.0	89.15
67.3	$1.3E{+}2$	0.0	0.0011	0.0	89.15
67.4	$1.3E{+}2$	0.0	0.0011	0.0	89.15
67.5	$1.3E{+}2$	0.0	0.0011	0.0	89.15
67.6	$1.3E{+}2$	0.0	0.00109	0.0	89.15
67.7	$1.3E{+}2$	0.0	0.00109	0.0	89.15
67.8	$1.3E{+}2$	0.0	0.00109	0.0	89.15
67.9	$1.3E{+}2$	0.0	0.00108	0.0	89.16
68	$1.3E{+}2$	0.0	0.00108	0.0	89.16
68.1	$1.3E{+}2$	0.0	0.00108	0.0	89.16

Table 7.3: Prandtl-Meyer function for k=1.4 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
68.2	1.3E+2	0.0	0.00107	0.0	89.16
68.3	1.3E+2	0.0	0.00107	0.0	89.16
68.4	1.3E+2	0.0	0.00107	0.0	89.16
68.5	1.3E+2	0.0	0.00106	0.0	89.16
68.6	1.3E+2	0.0	0.00106	0.0	89.16
68.7	1.3E+2	0.0	0.00106	0.0	89.17
68.8	1.3E+2	0.0	0.00106	0.0	89.17
68.9	1.3E+2	0.0	0.00105	0.0	89.17
69	1.3E+2	0.0	0.00105	0.0	89.17
69.1	1.3E+2	0.0	0.00105	0.0	89.17
69.2	1.3E+2	0.0	0.00104	0.0	89.17
69.3	1.3E+2	0.0	0.00104	0.0	89.17
69.4	1.3E+2	0.0	0.00104	0.0	89.17
69.5	1.3E+2	0.0	0.00103	0.0	89.18
69.6	1.3E+2	0.0	0.00103	0.0	89.18
69.7	1.3E+2	0.0	0.00103	0.0	89.18
69.8	1.3E+2	0.0	0.00103	0.0	89.18
69.9	1.3E+2	0.0	0.00102	0.0	89.18
70	1.3E+2	0.0	0.00102	0.0	89.18

7.4 Prandtl–Meyer Function for k=1.67

Table 7.4: Prandtl-Meyer function for k=1.67

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
1	0.0	0.48667	0.74906	0.6497	45
1.01	0.040162	0.4806	0.7453	0.64484	45.29
1.02	0.11275	0.47459	0.74155	0.63999	45.57
1.03	0.2056	0.46861	0.73779	0.63516	45.85
1.04	0.31422	0.46269	0.73403	0.63034	46.12
1.05	0.43592	0.45682	0.73028	0.62554	46.4
1.06	0.56886	0.45099	0.72653	0.62075	46.67

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
1.07	0.71164	0.44522	0.72278	0.61598	46.94
1.08	0.86318	0.43949	0.71904	0.61122	47.2
1.09	1.023	0.43382	0.7153	0.60648	47.47
1.1	1.189	0.4282	0.71157	0.60176	47.73
1.11	1.362	0.42262	0.70784	0.59706	47.98
1.12	1.541	0.4171	0.70411	0.59238	48.24
1.13	1.725	0.41164	0.7004	0.58772	48.49
1.14	1.915	0.40622	0.69669	0.58308	48.74
1.15	2.108	0.40086	0.69298	0.57846	48.99
1.16	2.307	0.39555	0.68929	0.57386	49.24
1.17	2.509	0.3903	0.6856	0.56928	49.48
1.18	2.714	0.3851	0.68192	0.56473	49.72
1.19	2.923	0.37995	0.67824	0.56019	49.96
1.2	3.136	0.37485	0.67458	0.55568	50.19
1.21	3.351	0.36981	0.67093	0.5512	50.43
1.22	3.568	0.36483	0.66728	0.54673	50.66
1.23	3.789	0.35989	0.66365	0.5423	50.89
1.24	4.011	0.35501	0.66002	0.53788	51.12
1.25	4.236	0.35019	0.65641	0.53349	51.34
1.26	4.462	0.34542	0.65281	0.52913	51.56
1.27	4.691	0.3407	0.64922	0.52479	51.78
1.28	4.921	0.33604	0.64563	0.52047	52
1.29	5.153	0.33142	0.64207	0.51618	52.22
1.3	5.386	0.32687	0.63851	0.51192	52.43
1.31	5.62	0.32236	0.63496	0.50769	52.64
1.32	5.856	0.31791	0.63143	0.50348	52.85
1.33	6.092	0.31351	0.62791	0.49929	53.06
1.34	6.33	0.30917	0.6244	0.49514	53.27
1.35	6.569	0.30487	0.62091	0.49101	53.47
1.36	6.808	0.30063	0.61743	0.48691	53.67
1.37	7.048	0.29644	0.61396	0.48283	53.87
1.38	7.289	0.2923	0.61051	0.47878	54.07
1.39	7.53	0.28821	0.60707	0.47476	54.27

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
1.4	7.772	0.28418	0.60365	0.47077	54.46
1.41	8.014	0.28019	0.60024	0.46681	54.65
1.42	8.257	0.27626	0.59684	0.46287	54.85
1.43	8.5	0.27237	0.59346	0.45896	55.03
1.44	8.743	0.26854	0.59009	0.45508	55.22
1.45	8.986	0.26475	0.58674	0.45123	55.41
1.46	9.23	0.26101	0.5834	0.4474	55.59
1.47	9.473	0.25733	0.58008	0.4436	55.77
1.48	9.717	0.25369	0.57677	0.43984	55.95
1.49	9.961	0.25009	0.57348	0.4361	56.13
1.5	10.2	0.24655	0.57021	0.43238	56.31
1.51	10.45	0.24305	0.56695	0.4287	56.49
1.52	10.69	0.2396	0.5637	0.42504	56.66
1.53	10.93	0.23619	0.56047	0.42142	56.83
1.54	11.18	0.23283	0.55726	0.41782	57
1.55	11.42	0.22952	0.55407	0.41424	57.17
1.56	11.66	0.22625	0.55089	0.4107	57.34
1.57	11.9	0.22302	0.54772	0.40719	57.51
1.58	12.15	0.21984	0.54458	0.4037	57.67
1.59	12.39	0.21671	0.54144	0.40024	57.83
1.6	12.63	0.21361	0.53833	0.39681	57.99
1.61	12.87	0.21056	0.53523	0.3934	58.15
1.62	13.11	0.20755	0.53215	0.39003	58.31
1.63	13.35	0.20458	0.52908	0.38668	58.47
1.64	13.59	0.20166	0.52603	0.38336	58.63
1.65	13.83	0.19877	0.523	0.38006	58.78
1.66	14.06	0.19593	0.51999	0.3768	58.93
1.67	14.3	0.19313	0.51699	0.37356	59.09
1.68	14.54	0.19036	0.51401	0.37035	59.24
1.69	14.78	0.18763	0.51104	0.36716	59.39
1.7	15.01	0.18495	0.50809	0.364	59.53
1.71	15.25	0.1823	0.50516	0.36087	59.68
1.72	15.48	0.17969	0.50224	0.35777	59.83

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
1.73	15.71	0.17711	0.49935	0.35469	59.97
1.74	15.95	0.17458	0.49646	0.35164	60.11
1.75	16.18	0.17208	0.4936	0.34862	60.26
1.76	16.41	0.16961	0.49075	0.34562	60.4
1.77	16.64	0.16718	0.48792	0.34265	60.53
1.78	16.87	0.16479	0.4851	0.3397	60.67
1.79	17.1	0.16243	0.48231	0.33678	60.81
1.8	17.33	0.16011	0.47952	0.33389	60.95
1.81	17.56	0.15782	0.47676	0.33102	61.08
1.82	17.79	0.15556	0.47401	0.32817	61.21
1.83	18.01	0.15333	0.47128	0.32535	61.35
1.84	18.24	0.15114	0.46856	0.32256	61.48
1.85	18.46	0.14898	0.46587	0.31979	61.61
1.86	18.69	0.14685	0.46318	0.31705	61.74
1.87	18.91	0.14475	0.46052	0.31433	61.86
1.88	19.13	0.14269	0.45787	0.31163	61.99
1.89	19.36	0.14065	0.45524	0.30896	62.12
1.9	19.58	0.13865	0.45262	0.30632	62.24
1.91	19.8	0.13667	0.45002	0.3037	62.37
1.92	20.02	0.13472	0.44744	0.3011	62.49
1.93	20.23	0.1328	0.44487	0.29852	62.61
1.94	20.45	0.13091	0.44232	0.29597	62.73
1.95	20.67	0.12905	0.43979	0.29344	62.85
1.96	20.88	0.12722	0.43727	0.29094	62.97
1.97	21.1	0.12541	0.43476	0.28846	63.09
1.98	21.31	0.12363	0.43228	0.286	63.2
1.99	21.53	0.12188	0.42981	0.28356	63.32
2	21.74	0.12015	0.42735	0.28115	63.43
2.02	22.16	0.11677	0.42249	0.27638	63.66
2.04	22.58	0.11349	0.41769	0.27171	63.89
2.06	23	0.11031	0.41295	0.26712	64.11
2.08	23.41	0.10722	0.40827	0.26262	64.32
2.1	23.82	0.10422	0.40366	0.2582	64.54

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
2.12	24.22	0.10132	0.3991	0.25387	64.75
2.14	24.62	0.098498	0.39461	0.24961	64.95
2.16	25.02	0.095761	0.39017	0.24543	65.16
2.18	25.42	0.093106	0.38579	0.24134	65.36
2.2	25.81	0.09053	0.38148	0.23731	65.56
2.22	26.19	0.08803	0.37721	0.23337	65.75
2.24	26.58	0.085604	0.37301	0.2295	65.94
2.26	26.96	0.083251	0.36886	0.2257	66.13
2.28	27.34	0.080968	0.36477	0.22197	66.32
2.3	27.71	0.078752	0.36073	0.21831	66.5
2.32	28.08	0.076602	0.35675	0.21472	66.68
2.34	28.45	0.074516	0.35282	0.2112	66.86
2.36	28.81	0.072492	0.34894	0.20775	67.04
2.38	29.17	0.070528	0.34512	0.20436	67.21
2.4	29.53	0.068622	0.34134	0.20103	67.38
2.42	29.88	0.066772	0.33762	0.19777	67.55
2.44	30.24	0.064977	0.33395	0.19457	67.71
2.46	30.58	0.063235	0.33033	0.19143	67.88
2.48	30.93	0.061544	0.32676	0.18835	68.04
2.5	31.27	0.059903	0.32323	0.18532	68.2
2.52	31.61	0.05831	0.31976	0.18236	68.36
2.54	31.94	0.056764	0.31633	0.17945	68.51
2.56	32.27	0.055263	0.31294	0.17659	68.66
2.58	32.6	0.053806	0.30961	0.17379	68.81
2.6	32.93	0.052391	0.30632	0.17104	68.96
2.62	33.25	0.051018	0.30307	0.16834	69.11
2.64	33.57	0.049685	0.29987	0.16569	69.25
2.66	33.88	0.04839	0.29671	0.16309	69.4
2.68	34.2	0.047133	0.29359	0.16054	69.54
2.7	34.51	0.045913	0.29052	0.15804	69.68
2.72	34.82	0.044727	0.28748	0.15558	69.81
2.74	35.12	0.043576	0.28449	0.15317	69.95
2.76	35.42	0.042458	0.28154	0.15081	70.08

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
2.78	35.72	0.041372	0.27863	0.14848	70.22
2.8	36.02	0.040317	0.27576	0.1462	70.35
2.82	36.31	0.039292	0.27292	0.14397	70.47
2.84	36.6	0.038296	0.27013	0.14177	70.6
2.86	36.89	0.037329	0.26737	0.13962	70.73
2.88	37.18	0.036389	0.26465	0.1375	70.85
2.9	37.46	0.035476	0.26196	0.13542	70.97
2.92	37.74	0.034589	0.25931	0.13339	71.1
2.94	38.02	0.033726	0.2567	0.13138	71.21
2.96	38.3	0.032888	0.25412	0.12942	71.33
2.98	38.57	0.032074	0.25158	0.12749	71.45
3	38.84	0.031282	0.24907	0.1256	71.57
3.02	39.11	0.030512	0.24659	0.12374	71.68
3.04	39.37	0.029764	0.24414	0.12191	71.79
3.06	39.64	0.029036	0.24173	0.12012	71.9
3.08	39.9	0.028329	0.23935	0.11836	72.01
3.1	40.15	0.027641	0.237	0.11663	72.12
3.12	40.41	0.026972	0.23469	0.11493	72.23
3.14	40.66	0.026321	0.2324	0.11326	72.33
3.16	40.91	0.025689	0.23014	0.11162	72.44
3.18	41.16	0.025073	0.22791	0.11001	72.54
3.2	41.41	0.024475	0.22571	0.10843	72.65
3.22	41.66	0.023892	0.22354	0.10688	72.75
3.24	41.9	0.023326	0.2214	0.10536	72.85
3.26	42.14	0.022774	0.21929	0.10386	72.95
3.28	42.38	0.022238	0.2172	0.10239	73.04
3.3	42.61	0.021716	0.21514	0.10094	73.14
3.32	42.85	0.021208	0.21311	0.099518	73.24
3.34	43.08	0.020714	0.2111	0.098123	73.33
3.36	43.31	0.020232	0.20912	0.096751	73.43
3.38	43.54	0.019764	0.20716	0.095403	73.52
3.4	43.76	0.019308	0.20523	0.094079	73.61
3.42	43.98	0.018864	0.20332	0.092777	73.7

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
3.44	44.21	0.018431	0.20144	0.091498	73.79
3.46	44.43	0.01801	0.19958	0.090241	73.88
3.48	44.64	0.0176	0.19775	0.089005	73.97
3.5	44.86	0.017201	0.19593	0.087791	74.05
3.52	45.07	0.016812	0.19415	0.086597	74.14
3.54	45.29	0.016434	0.19238	0.085423	74.23
3.56	45.5	0.016065	0.19063	0.08427	74.31
3.58	45.71	0.015705	0.18891	0.083136	74.39
3.6	45.91	0.015355	0.18721	0.082021	74.48
3.62	46.12	0.015014	0.18553	0.080924	74.56
3.64	46.32	0.014681	0.18387	0.079847	74.64
3.66	46.52	0.014357	0.18223	0.078787	74.72
3.68	46.72	0.014042	0.18061	0.077745	74.8
3.7	46.92	0.013734	0.17901	0.07672	74.88
3.72	47.12	0.013434	0.17744	0.075712	74.95
3.74	47.31	0.013142	0.17588	0.074721	75.03
3.76	47.51	0.012856	0.17433	0.073746	75.11
3.78	47.7	0.012578	0.17281	0.072787	75.18
3.8	47.89	0.012307	0.17131	0.071844	75.26
3.82	48.08	0.012043	0.16982	0.070916	75.33
3.84	48.26	0.011786	0.16836	0.070003	75.4
3.86	48.45	0.011534	0.16691	0.069106	75.48
3.88	48.63	0.011289	0.16547	0.068222	75.55
3.9	48.82	0.01105	0.16406	0.067354	75.62
3.92	49	0.010817	0.16266	0.066499	75.69
3.94	49.18	0.010589	0.16128	0.065657	75.76
3.96	49.36	0.010367	0.15991	0.06483	75.83
3.98	49.53	0.010151	0.15857	0.064015	75.9
4	49.71	0.00994	0.15723	0.063214	75.96
4.02	49.88	0.00973	0.15592	0.062425	76.03
4.04	50.05	0.00953	0.15461	0.061648	76.1
4.06	50.22	0.00934	0.15333	0.060884	76.16
4.08	50.39	0.00914	0.15206	0.060132	76.23

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
4.1	50.56	0.00896	0.1508	0.059392	76.29
4.12	50.73	0.00877	0.14956	0.058663	76.36
4.14	50.89	0.0086	0.14833	0.057946	76.42
4.16	51.06	0.00842	0.14712	0.05724	76.48
4.18	51.22	0.00825	0.14592	0.056545	76.55
4.2	51.38	0.00808	0.14473	0.05586	76.61
4.22	51.54	0.00792	0.14356	0.055187	76.67
4.24	51.7	0.00776	0.1424	0.054523	76.73
4.26	51.86	0.00761	0.14125	0.05387	76.79
4.28	52.02	0.00746	0.14012	0.053226	76.85
4.3	52.17	0.00731	0.139	0.052593	76.91
4.32	52.33	0.00717	0.13789	0.051969	76.97
4.34	52.48	0.00703	0.1368	0.051354	77.02
4.36	52.63	0.00689	0.13572	0.050749	77.08
4.38	52.78	0.00675	0.13465	0.050153	77.14
4.4	52.93	0.00662	0.13359	0.049566	77.2
4.42	53.08	0.00649	0.13254	0.048988	77.25
4.44	53.23	0.00637	0.13151	0.048418	77.31
4.46	53.38	0.00624	0.13049	0.047857	77.36
4.48	53.52	0.00612	0.12947	0.047304	77.42
4.5	53.66	0.00601	0.12847	0.046759	77.47
4.52	53.81	0.00589	0.12748	0.046223	77.52
4.54	53.95	0.00578	0.1265	0.045694	77.58
4.56	54.09	0.00567	0.12554	0.045173	77.63
4.58	54.23	0.00556	0.12458	0.044659	77.68
4.6	54.37	0.00546	0.12363	0.044154	77.74
4.62	54.51	0.00536	0.12269	0.043655	77.79
4.64	54.64	0.00526	0.12177	0.043164	77.84
4.66	54.78	0.00516	0.12085	0.042679	77.89
4.68	54.91	0.00506	0.11994	0.042202	77.94
4.7	55.05	0.00497	0.11905	0.041732	77.99
4.72	55.18	0.00488	0.11816	0.041268	78.04
4.74	55.31	0.00479	0.11728	0.040811	78.09

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
4.76	55.44	0.0047	0.11641	0.040361	78.14
4.78	55.57	0.00461	0.11555	0.039917	78.18
4.8	55.7	0.00453	0.1147	0.039479	78.23
4.82	55.83	0.00445	0.11386	0.039047	78.28
4.84	55.96	0.00437	0.11303	0.038622	78.33
4.86	56.08	0.00429	0.1122	0.038202	78.37
4.88	56.21	0.00421	0.11139	0.037788	78.42
4.9	56.33	0.00413	0.11058	0.03738	78.47
4.92	56.46	0.00406	0.10978	0.036978	78.51
4.94	56.58	0.00399	0.10899	0.036581	78.56
4.96	56.7	0.00392	0.10821	0.03619	78.6
4.98	56.82	0.00385	0.10743	0.035804	78.65
5	56.94	0.00378	0.10667	0.035424	78.69
5.04	57.18	0.00365	0.10516	0.034679	78.78
5.08	57.42	0.00352	0.10368	0.033953	78.86
5.12	57.65	0.0034	0.10223	0.033248	78.95
5.16	57.88	0.00328	0.10081	0.032561	79.03
5.2	58.1	0.00317	0.099419	0.031892	79.11
5.24	58.32	0.00306	0.098056	0.031242	79.2
5.28	58.54	0.00296	0.096719	0.030608	79.28
5.32	58.76	0.00286	0.095408	0.029991	79.35
5.36	58.97	0.00277	0.094123	0.02939	79.43
5.4	59.18	0.00267	0.092863	0.028805	79.51
5.44	59.39	0.00259	0.091627	0.028234	79.58
5.48	59.59	0.0025	0.090414	0.027679	79.66
5.52	59.8	0.00242	0.089225	0.027137	79.73
5.56	60	0.00234	0.088059	0.026609	79.8
5.6	60.19	0.00227	0.086914	0.026095	79.88
5.64	60.39	0.0022	0.085791	0.025593	79.95
5.68	60.58	0.00213	0.084689	0.025104	80.02
5.72	60.77	0.00206	0.083607	0.024627	80.08
5.76	60.96	0.00199	0.082546	0.024162	80.15
5.8	61.14	0.00193	0.081504	0.023708	80.22

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
5.84	61.33	0.00187	0.08048	0.023265	80.28
5.88	61.51	0.00181	0.079476	0.022833	80.35
5.92	61.69	0.00176	0.07849	0.022411	80.41
5.96	61.86	0.00171	0.077521	0.022	80.48
6	62.04	0.00165	0.07657	0.021598	80.54
6.04	62.21	0.0016	0.075635	0.021206	80.6
6.08	62.38	0.00156	0.074718	0.020823	80.66
6.12	62.55	0.00151	0.073816	0.020449	80.72
6.16	62.71	0.00146	0.07293	0.020084	80.78
6.2	62.88	0.00142	0.07206	0.019727	80.84
6.24	63.04	0.00138	0.071204	0.019379	80.9
6.28	63.2	0.00134	0.070364	0.019038	80.95
6.32	63.36	0.0013	0.069538	0.018706	81.01
6.36	63.51	0.00126	0.068726	0.01838	81.06
6.4	63.67	0.00123	0.067927	0.018063	81.12
6.44	63.82	0.00119	0.067143	0.017752	81.17
6.48	63.97	0.00116	0.066371	0.017449	81.23
6.52	64.12	0.00113	0.065613	0.017152	81.28
6.56	64.27	0.00109	0.064867	0.016862	81.33
6.6	64.41	0.00106	0.064133	0.016578	81.38
6.64	64.56	0.00103	0.063411	0.0163	81.44
6.68	64.7	0.00101	0.062702	0.016029	81.49
6.72	64.84	0.000977	0.062004	0.015763	81.54
6.76	64.98	0.000951	0.061317	0.015503	81.59
6.8	65.12	0.000925	0.060641	0.015249	81.63
6.84	65.26	0.0009	0.059977	0.015	81.68
6.88	65.39	0.000875	0.059322	0.014757	81.73
6.92	65.53	0.000852	0.058679	0.014518	81.78
6.96	65.66	0.000829	0.058045	0.014285	81.82
7	65.79	0.000807	0.057422	0.014056	81.87
7.04	65.92	0.000786	0.056808	0.013833	81.92
7.08	66.05	0.000765	0.056204	0.013614	81.96
7.12	66.17	0.000745	0.055609	0.013399	82.01

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
7.16	66.3	0.000726	0.055024	0.013189	82.05
7.2	66.42	0.000707	0.054447	0.012984	82.09
7.24	66.55	0.000689	0.05388	0.012782	82.14
7.28	66.67	0.000671	0.053321	0.012585	82.18
7.32	66.79	0.000654	0.05277	0.012391	82.22
7.36	66.91	0.000637	0.052228	0.012202	82.26
7.4	67.03	0.000621	0.051694	0.012016	82.3
7.44	67.14	0.000606	0.051168	0.011834	82.34
7.48	67.26	0.00059	0.05065	0.011656	82.39
7.52	67.37	0.000576	0.050139	0.011481	82.43
7.56	67.49	0.000561	0.049637	0.011309	82.46
7.6	67.6	0.000547	0.049141	0.011141	82.5
7.64	67.71	0.000534	0.048653	0.010976	82.54
7.68	67.82	0.000521	0.048172	0.010815	82.58
7.72	67.93	0.000508	0.047697	0.010656	82.62
7.76	68.04	0.000496	0.04723	0.010501	82.66
7.8	68.14	0.000484	0.04677	0.010348	82.69
7.84	68.25	0.000472	0.046316	0.010199	82.73
7.88	68.35	0.000461	0.045868	0.010052	82.77
7.92	68.46	0.00045	0.045427	0.00991	82.8
7.96	68.56	0.000439	0.044992	0.00977	82.84
8	68.66	0.000429	0.044563	0.00963	82.87
8.04	68.76	0.000419	0.04414	0.00949	82.91
8.08	68.86	0.000409	0.043724	0.00936	82.94
8.12	68.96	0.0004	0.043312	0.00923	82.98
8.16	69.06	0.00039	0.042907	0.0091	83.01
8.2	69.16	0.000381	0.042507	0.00897	83.05
8.24	69.25	0.000373	0.042113	0.00885	83.08
8.28	69.35	0.000364	0.041724	0.00873	83.11
8.32	69.44	0.000356	0.04134	0.00861	83.15
8.36	69.54	0.000348	0.040962	0.00849	83.18
8.4	69.63	0.00034	0.040588	0.00838	83.21
8.44	69.72	0.000332	0.04022	0.00826	83.24

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
8.48	69.81	0.000325	0.039857	0.00815	83.27
8.52	69.9	0.000318	0.039498	0.00804	83.31
8.56	69.99	0.000311	0.039144	0.00793	83.34
8.6	70.08	0.000304	0.038795	0.00783	83.37
8.64	70.17	0.000297	0.03845	0.00773	83.4
8.68	70.26	0.000291	0.03811	0.00762	83.43
8.72	70.34	0.000284	0.037775	0.00752	83.46
8.76	70.43	0.000278	0.037443	0.00743	83.49
8.8	70.51	0.000272	0.037116	0.00733	83.52
8.84	70.6	0.000266	0.036793	0.00723	83.55
8.88	70.68	0.00026	0.036475	0.00714	83.57
8.92	70.76	0.000255	0.03616	0.00705	83.6
8.96	70.85	0.000249	0.03585	0.00696	83.63
9	70.93	0.000244	0.035543	0.00687	83.66
9.04	71.01	0.000239	0.03524	0.00678	83.69
9.08	71.09	0.000234	0.034941	0.0067	83.72
9.12	71.17	0.000229	0.034646	0.00661	83.74
9.16	71.25	0.000224	0.034354	0.00653	83.77
9.2	71.32	0.00022	0.034066	0.00645	83.8
9.24	71.4	0.000215	0.033782	0.00637	83.82
9.28	71.48	0.000211	0.033501	0.00629	83.85
9.32	71.55	0.000206	0.033224	0.00621	83.88
9.36	71.63	0.000202	0.03295	0.00614	83.9
9.4	71.7	0.000198	0.032679	0.00606	83.93
9.44	71.78	0.000194	0.032412	0.00599	83.95
9.48	71.85	0.00019	0.032148	0.00591	83.98
9.52	71.92	0.000186	0.031887	0.00584	84
9.56	72	0.000183	0.031629	0.00577	84.03
9.6	72.07	0.000179	0.031374	0.0057	84.05
9.64	72.14	0.000175	0.031122	0.00563	84.08
9.68	72.21	0.000172	0.030873	0.00557	84.1
9.72	72.28	0.000168	0.030628	0.0055	84.13
9.76	72.35	0.000165	0.030385	0.00544	84.15

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
9.8	72.42	0.000162	0.030145	0.00537	84.17
9.84	72.49	0.000159	0.029907	0.00531	84.2
9.88	72.56	0.000156	0.029673	0.00525	84.22
9.92	72.62	0.000153	0.029441	0.00519	84.24
9.96	72.69	0.00015	0.029212	0.00513	84.27
10	72.76	0.000147	0.028986	0.00507	84.29
10.1	72.92	0.00014	0.028431	0.00492	84.35
10.2	73.08	0.000133	0.027891	0.00478	84.4
10.3	73.24	0.000127	0.027367	0.00465	84.45
10.4	73.39	0.000121	0.026857	0.00452	84.51
10.5	73.54	0.000116	0.026362	0.0044	84.56
10.6	73.69	0.000111	0.02588	0.00428	84.61
10.7	73.84	0.000106	0.02541	0.00416	84.66
10.8	73.98	0.000101	0.024954	0.00405	84.71
10.9	74.12	$9.67E{-}5$	0.024509	0.00394	84.76
11	74.26	$9.25E{-}5$	0.024076	0.00384	84.81
11.1	74.4	$8.85E{-}5$	0.023654	0.00374	84.85
11.2	74.53	$8.47E{-}5$	0.023244	0.00364	84.9
11.3	74.66	$8.11E{-}5$	0.022843	0.00355	84.94
11.4	74.79	$7.77E{-}5$	0.022453	0.00346	84.99
11.5	74.92	$7.45E{-}5$	0.022073	0.00337	85.03
11.6	75.05	$7.14E{-}5$	0.021703	0.00329	85.07
11.7	75.17	$6.85E{-}5$	0.021341	0.00321	85.11
11.8	75.29	$6.57E{-}5$	0.020988	0.00313	85.16
11.9	75.41	$6.3E-5$	0.020644	0.00305	85.2
12	75.52	$6.05E{-}5$	0.020309	0.00298	85.24
12.1	75.64	$5.81E{-}5$	0.019981	0.00291	85.28
12.2	75.75	$5.58E{-}5$	0.019661	0.00284	85.31
12.3	75.86	$5.36E{-}5$	0.019349	0.00277	85.35
12.4	75.97	$5.16E{-}5$	0.019044	0.00271	85.39
12.5	76.08	$4.96E{-}5$	0.018746	0.00264	85.43
12.6	76.19	$4.77E{-}5$	0.018455	0.00258	85.46
12.7	76.29	$4.59E{-}5$	0.018171	0.00252	85.5

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
12.8	76.4	$4.41E{-5}$	0.017893	0.00247	85.53
12.9	76.5	$4.25E{-5}$	0.017622	0.00241	85.57
13	76.6	$4.09E{-5}$	0.017357	0.00236	85.6
13.1	76.7	$3.94E{-5}$	0.017097	0.0023	85.63
13.2	76.79	$3.8E-5$	0.016843	0.00225	85.67
13.3	76.89	$3.66E{-5}$	0.016595	0.0022	85.7
13.4	76.98	$3.53E{-5}$	0.016353	0.00216	85.73
13.5	77.07	$3.4E-5$	0.016115	0.00211	85.76
13.6	77.17	$3.28E{-5}$	0.015883	0.00206	85.79
13.7	77.26	$3.16E{-5}$	0.015655	0.00202	85.83
13.8	77.35	$3.05E{-5}$	0.015433	0.00198	85.86
13.9	77.43	$2.95E{-5}$	0.015215	0.00194	85.89
14	77.52	$2.84E{-5}$	0.015002	0.0019	85.91
14.1	77.6	$2.75E{-5}$	0.014793	0.00186	85.94
14.2	77.69	$2.65E{-5}$	0.014588	0.00182	85.97
14.3	77.77	$2.56E{-5}$	0.014388	0.00178	86
14.4	77.85	$2.48E{-5}$	0.014191	0.00175	86.03
14.5	77.93	$2.39E{-5}$	0.013999	0.00171	86.05
14.6	78.01	$2.31E{-5}$	0.013811	0.00168	86.08
14.7	78.09	$2.24E{-5}$	0.013626	0.00164	86.11
14.8	78.17	$2.16E{-5}$	0.013445	0.00161	86.13
14.9	78.24	$2.09E{-5}$	0.013267	0.00158	86.16
15	78.32	$2.03E{-5}$	0.013093	0.00155	86.19
15.1	78.39	$1.96E{-5}$	0.012923	0.00152	86.21
15.2	78.47	$1.9E-5$	0.012755	0.00149	86.24
15.3	78.54	$1.84E{-5}$	0.012591	0.00146	86.26
15.4	78.61	$1.78E{-5}$	0.01243	0.00143	86.28
15.5	78.68	$1.72E{-5}$	0.012272	0.0014	86.31
15.6	78.75	$1.67E{-5}$	0.012117	0.00138	86.33
15.7	78.82	$1.62E{-5}$	0.011965	0.00135	86.36
15.8	78.89	$1.57E{-5}$	0.011816	0.00133	86.38
15.9	78.96	$1.52E{-5}$	0.01167	0.0013	86.4
16	79.02	$1.47E{-5}$	0.011526	0.00128	86.42

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
16.1	79.09	$1.43E{-5}$	0.011385	0.00126	86.45
16.2	79.15	$1.39E{-5}$	0.011246	0.00123	86.47
16.3	79.22	$1.35E{-5}$	0.01111	0.00121	86.49
16.4	79.28	$1.31E{-5}$	0.010977	0.00119	86.51
16.5	79.34	$1.27E{-5}$	0.010846	0.00117	86.53
16.6	79.4	$1.23E{-5}$	0.010717	0.00115	86.55
16.7	79.46	$1.19E{-5}$	0.01059	0.00113	86.57
16.8	79.53	$1.16E{-5}$	0.010466	0.00111	86.59
16.9	79.58	$1.13E{-5}$	0.010343	0.00109	86.61
17	79.64	$1.09E{-5}$	0.010223	0.00107	86.63
17.1	79.7	$1.06E{-5}$	0.010105	0.00105	86.65
17.2	79.76	$1.03E{-5}$	0.00999	0.00103	86.67
17.3	79.82	$1.0E-5$	0.00988	0.00102	86.69
17.4	79.87	$9.75E{-6}$	0.00976	0.000999	86.71
17.5	79.93	$9.48E{-6}$	0.00965	0.000982	86.73
17.6	79.98	$9.21E{-6}$	0.00954	0.000965	86.75
17.7	80.04	$8.96E{-6}$	0.00944	0.000949	86.77
17.8	80.09	$8.71E{-6}$	0.00933	0.000934	86.78
17.9	80.14	$8.48E{-6}$	0.00923	0.000918	86.8
18	80.2	$8.25E{-6}$	0.00913	0.000903	86.82
18.1	80.25	$8.02E{-6}$	0.00903	0.000889	86.84
18.2	80.3	$7.81E{-6}$	0.00893	0.000874	86.86
18.3	80.35	$7.6E-6$	0.00883	0.00086	86.87
18.4	80.4	$7.4E-6$	0.00874	0.000846	86.89
18.5	80.45	$7.2E-6$	0.00865	0.000833	86.91
18.6	80.5	$7.01E{-6}$	0.00855	0.00082	86.92
18.7	80.55	$6.83E{-6}$	0.00846	0.000807	86.94
18.8	80.6	$6.65E{-6}$	0.00838	0.000794	86.96
18.9	80.64	$6.48E{-6}$	0.00829	0.000782	86.97
19	80.69	$6.31E{-6}$	0.0082	0.00077	86.99
19.1	80.74	$6.15E{-6}$	0.00812	0.000758	87
19.2	80.78	$5.99E{-6}$	0.00803	0.000746	87.02
19.3	80.83	$5.84E{-6}$	0.00795	0.000735	87.03

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
19.4	80.87	$5.7E-6$	0.00787	0.000724	87.05
19.5	80.92	$5.55E-6$	0.00779	0.000713	87.06
19.6	80.96	$5.41E-6$	0.00771	0.000702	87.08
19.7	81.01	$5.28E-6$	0.00763	0.000692	87.09
19.8	81.05	$5.15E-6$	0.00756	0.000681	87.11
19.9	81.09	$5.02E-6$	0.00748	0.000671	87.12
20	81.14	$4.9E-6$	0.00741	0.000661	87.14
20.1	81.18	$4.78E-6$	0.00733	0.000652	87.15
20.2	81.22	$4.66E-6$	0.00726	0.000642	87.17
20.3	81.26	$4.55E-6$	0.00719	0.000633	87.18
20.4	81.3	$4.44E-6$	0.00712	0.000624	87.19
20.5	81.34	$4.34E-6$	0.00705	0.000615	87.21
20.6	81.38	$4.23E-6$	0.00699	0.000606	87.22
20.7	81.42	$4.13E-6$	0.00692	0.000597	87.23
20.8	81.46	$4.03E-6$	0.00685	0.000589	87.25
20.9	81.5	$3.94E-6$	0.00679	0.00058	87.26
21	81.54	$3.85E-6$	0.00672	0.000572	87.27
21.1	81.58	$3.76E-6$	0.00666	0.000564	87.29
21.2	81.62	$3.67E-6$	0.0066	0.000556	87.3
21.3	81.65	$3.59E-6$	0.00654	0.000549	87.31
21.4	81.69	$3.5E-6$	0.00648	0.000541	87.32
21.5	81.73	$3.42E-6$	0.00642	0.000534	87.34
21.6	81.77	$3.35E-6$	0.00636	0.000526	87.35
21.7	81.8	$3.27E-6$	0.0063	0.000519	87.36
21.8	81.84	$3.2E-6$	0.00624	0.000512	87.37
21.9	81.87	$3.13E-6$	0.00619	0.000505	87.39
22	81.91	$3.06E-6$	0.00613	0.000499	87.4
22.1	81.94	$2.99E-6$	0.00607	0.000492	87.41
22.2	81.98	$2.92E-6$	0.00602	0.000485	87.42
22.3	82.01	$2.86E-6$	0.00597	0.000479	87.43
22.4	82.05	$2.79E-6$	0.00591	0.000473	87.44
22.5	82.08	$2.73E-6$	0.00586	0.000466	87.46
22.6	82.11	$2.67E-6$	0.00581	0.00046	87.47

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
22.7	82.15	$2.62E{-6}$	0.00576	0.000454	87.48
22.8	82.18	$2.56E{-6}$	0.00571	0.000448	87.49
22.9	82.21	$2.51E{-6}$	0.00566	0.000443	87.5
23	82.24	$2.45E{-6}$	0.00561	0.000437	87.51
23.1	82.28	$2.4E-6$	0.00556	0.000431	87.52
23.2	82.31	$2.35E{-6}$	0.00552	0.000426	87.53
23.3	82.34	$2.3E-6$	0.00547	0.00042	87.54
23.4	82.37	$2.25E{-6}$	0.00542	0.000415	87.55
23.5	82.4	$2.2E-6$	0.00538	0.00041	87.56
23.6	82.43	$2.16E{-6}$	0.00533	0.000405	87.57
23.7	82.46	$2.11E{-6}$	0.00529	0.0004	87.58
23.8	82.49	$2.07E{-6}$	0.00524	0.000395	87.59
23.9	82.52	$2.03E{-6}$	0.0052	0.00039	87.6
24	82.55	$1.99E{-6}$	0.00516	0.000385	87.61
24.1	82.58	$1.94E{-6}$	0.00511	0.00038	87.62
24.2	82.61	$1.91E{-6}$	0.00507	0.000376	87.63
24.3	82.64	$1.87E{-6}$	0.00503	0.000371	87.64
24.4	82.67	$1.83E{-6}$	0.00499	0.000367	87.65
24.5	82.7	$1.79E{-6}$	0.00495	0.000362	87.66
24.6	82.72	$1.76E{-6}$	0.00491	0.000358	87.67
24.7	82.75	$1.72E{-6}$	0.00487	0.000354	87.68
24.8	82.78	$1.69E{-6}$	0.00483	0.000349	87.69
24.9	82.81	$1.65E{-6}$	0.00479	0.000345	87.7
25	82.84	$1.62E{-6}$	0.00475	0.000341	87.71
25.1	82.86	$1.59E{-6}$	0.00472	0.000337	87.72
25.2	82.89	$1.56E{-6}$	0.00468	0.000333	87.73
25.3	82.92	$1.53E{-6}$	0.00464	0.000329	87.74
25.4	82.94	$1.5E-6$	0.00461	0.000325	87.75
25.5	82.97	$1.47E{-6}$	0.00457	0.000322	87.75
25.6	82.99	$1.44E{-6}$	0.00453	0.000318	87.76
25.7	83.02	$1.41E{-6}$	0.0045	0.000314	87.77
25.8	83.05	$1.39E{-6}$	0.00446	0.000311	87.78
25.9	83.07	$1.36E{-6}$	0.00443	0.000307	87.79

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
26	83.1	$1.33E{-}6$	0.0044	0.000304	87.8
26.1	83.12	$1.31E{-}6$	0.00436	0.0003	87.81
26.2	83.15	$1.28E{-}6$	0.00433	0.000297	87.81
26.3	83.17	$1.26E{-}6$	0.0043	0.000293	87.82
26.4	83.2	0.0	0.00426	0.00029	87.83
26.5	83.22	0.0	0.00423	0.000287	87.84
26.6	83.24	0.0	0.0042	0.000284	87.85
26.7	83.27	0.0	0.00417	0.000281	87.86
26.8	83.29	0.0	0.00414	0.000277	87.86
26.9	83.32	0.0	0.00411	0.000274	87.87
27	83.34	0.0	0.00408	0.000271	87.88
27.1	83.36	0.0	0.00405	0.000268	87.89
27.2	83.39	0.0	0.00402	0.000265	87.89
27.3	83.41	0.0	0.00399	0.000263	87.9
27.4	83.43	0.0	0.00396	0.00026	87.91
27.5	83.45	0.0	0.00393	0.000257	87.92
27.6	83.48	0.0	0.0039	0.000254	87.92
27.7	83.5	0.0	0.00388	0.000251	87.93
27.8	83.52	0.0	0.00385	0.000249	87.94
27.9	83.54	0.0	0.00382	0.000246	87.95
28	83.56	0.0	0.00379	0.000244	87.95
28.1	83.59	0.0	0.00377	0.000241	87.96
28.2	83.61	0.0	0.00374	0.000238	87.97
28.3	83.63	0.0	0.00371	0.000236	87.98
28.4	83.65	0.0	0.00369	0.000233	87.98
28.5	83.67	0.0	0.00366	0.000231	87.99
28.6	83.69	0.0	0.00364	0.000229	88
28.7	83.71	0.0	0.00361	0.000226	88
28.8	83.73	0.0	0.00359	0.000224	88.01
28.9	83.75	0.0	0.00356	0.000222	88.02
29	83.77	0.0	0.00354	0.000219	88.03
29.1	83.79	0.0	0.00351	0.000217	88.03
29.2	83.81	0.0	0.00349	0.000215	88.04

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
29.3	83.83	0.0	0.00347	0.000213	88.05
29.4	83.85	0.0	0.00344	0.000211	88.05
29.5	83.87	0.0	0.00342	0.000209	88.06
29.6	83.89	0.0	0.0034	0.000206	88.07
29.7	83.91	0.0	0.00337	0.000204	88.07
29.8	83.93	0.0	0.00335	0.000202	88.08
29.9	83.95	0.0	0.00333	0.0002	88.08
30	83.97	0.0	0.00331	0.000198	88.09
30.1	83.99	0.0	0.00328	0.000196	88.1
30.2	84.01	0.0	0.00326	0.000194	88.1
30.3	84.03	0.0	0.00324	0.000193	88.11
30.4	84.04	0.0	0.00322	0.000191	88.12
30.5	84.06	0.0	0.0032	0.000189	88.12
30.6	84.08	0.0	0.00318	0.000187	88.13
30.7	84.1	0.0	0.00316	0.000185	88.13
30.8	84.12	0.0	0.00314	0.000183	88.14
30.9	84.14	0.0	0.00312	0.000182	88.15
31	84.15	0.0	0.0031	0.00018	88.15
31.1	84.17	0.0	0.00308	0.000178	88.16
31.2	84.19	0.0	0.00306	0.000176	88.16
31.3	84.21	0.0	0.00304	0.000175	88.17
31.4	84.22	0.0	0.00302	0.000173	88.18
31.5	84.24	0.0	0.003	0.000172	88.18
31.6	84.26	0.0	0.00298	0.00017	88.19
31.7	84.27	0.0	0.00296	0.000168	88.19
31.8	84.29	0.0	0.00294	0.000167	88.2
31.9	84.31	0.0	0.00292	0.000165	88.2
32	84.33	0.0	0.00291	0.000164	88.21
32.1	84.34	0.0	0.00289	0.000162	88.22
32.2	84.36	0.0	0.00287	0.000161	88.22
32.3	84.37	0.0	0.00285	0.000159	88.23
32.4	84.39	0.0	0.00284	0.000158	88.23
32.5	84.41	0.0	0.00282	0.000156	88.24

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
32.6	84.42	0.0	0.0028	0.000155	88.24
32.7	84.44	0.0	0.00278	0.000153	88.25
32.8	84.46	0.0	0.00277	0.000152	88.25
32.9	84.47	0.0	0.00275	0.000151	88.26
33	84.49	0.0	0.00273	0.000149	88.26
33.1	84.5	0.0	0.00272	0.000148	88.27
33.2	84.52	0.0	0.0027	0.000147	88.27
33.3	84.53	0.0	0.00268	0.000145	88.28
33.4	84.55	0.0	0.00267	0.000144	88.29
33.5	84.56	0.0	0.00265	0.000143	88.29
33.6	84.58	0.0	0.00264	0.000142	88.3
33.7	84.59	0.0	0.00262	0.00014	88.3
33.8	84.61	0.0	0.00261	0.000139	88.31
33.9	84.62	0.0	0.00259	0.000138	88.31
34	84.64	0.0	0.00258	0.000137	88.32
34.1	84.65	0.0	0.00256	0.000135	88.32
34.2	84.67	0.0	0.00255	0.000134	88.33
34.3	84.68	0.0	0.00253	0.000133	88.33
34.4	84.7	0.0	0.00252	0.000132	88.33
34.5	84.71	0.0	0.0025	0.000131	88.34
34.6	84.73	0.0	0.00249	0.00013	88.34
34.7	84.74	0.0	0.00247	0.000129	88.35
34.8	84.75	0.0	0.00246	0.000128	88.35
34.9	84.77	0.0	0.00244	0.000126	88.36
35	84.78	0.0	0.00243	0.000125	88.36
35.1	84.8	0.0	0.00242	0.000124	88.37
35.2	84.81	0.0	0.0024	0.000123	88.37
35.3	84.82	0.0	0.00239	0.000122	88.38
35.4	84.84	0.0	0.00238	0.000121	88.38
35.5	84.85	0.0	0.00236	0.00012	88.39
35.6	84.86	0.0	0.00235	0.000119	88.39
35.7	84.88	0.0	0.00234	0.000118	88.4
35.8	84.89	0.0	0.00232	0.000117	88.4

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
35.9	84.9	0.0	0.00231	0.000116	88.4
36	84.92	0.0	0.0023	0.000115	88.41
36.1	84.93	0.0	0.00229	0.000114	88.41
36.2	84.94	0.0	0.00227	0.000113	88.42
36.3	84.96	0.0	0.00226	0.000112	88.42
36.4	84.97	0.0	0.00225	0.000112	88.43
36.5	84.98	0.0	0.00224	0.000111	88.43
36.6	84.99	0.0	0.00222	0.00011	88.43
36.7	85.01	0.0	0.00221	0.000109	88.44
36.8	85.02	0.0	0.0022	0.000108	88.44
36.9	85.03	0.0	0.00219	0.000107	88.45
37	85.05	0.0	0.00218	0.000106	88.45
37.1	85.06	0.0	0.00216	0.000105	88.46
37.2	85.07	0.0	0.00215	0.000105	88.46
37.3	85.08	0.0	0.00214	0.000104	88.46
37.4	85.09	0.0	0.00213	0.000103	88.47
37.5	85.11	0.0	0.00212	0.000102	88.47
37.6	85.12	0.0	0.00211	0.000101	88.48
37.7	85.13	0.0	0.0021	0.0001	88.48
37.8	85.14	0.0	0.00208	$9.97E{-5}$	88.48
37.9	85.15	0.0	0.00207	$9.89E{-5}$	88.49
38	85.17	0.0	0.00206	$9.81E{-5}$	88.49
38.1	85.18	0.0	0.00205	$9.74E{-5}$	88.5
38.2	85.19	0.0	0.00204	$9.66E{-5}$	88.5
38.3	85.2	0.0	0.00203	$9.59E{-5}$	88.5
38.4	85.21	0.0	0.00202	$9.51E{-5}$	88.51
38.5	85.22	0.0	0.00201	$9.44E{-5}$	88.51
38.6	85.24	0.0	0.002	$9.37E{-5}$	88.52
38.7	85.25	0.0	0.00199	$9.29E{-5}$	88.52
38.8	85.26	0.0	0.00198	$9.22E{-5}$	88.52
38.9	85.27	0.0	0.00197	$9.15E{-5}$	88.53
39	85.28	0.0	0.00196	$9.08E{-5}$	88.53
39.1	85.29	0.0	0.00195	$9.01E{-5}$	88.53

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
39.2	85.3	0.0	0.00194	$8.94E{-}5$	88.54
39.3	85.32	0.0	0.00193	$8.88E{-}5$	88.54
39.4	85.33	0.0	0.00192	$8.81E{-}5$	88.55
39.5	85.34	0.0	0.00191	$8.74E{-}5$	88.55
39.6	85.35	0.0	0.0019	$8.68E{-}5$	88.55
39.7	85.36	0.0	0.00189	$8.61E{-}5$	88.56
39.8	85.37	0.0	0.00188	$8.55E{-}5$	88.56
39.9	85.38	0.0	0.00187	$8.48E{-}5$	88.56
40	85.39	0.0	0.00186	$8.42E{-}5$	88.57
40.1	85.4	0.0	0.00185	$8.36E{-}5$	88.57
40.2	85.41	0.0	0.00184	$8.3E-5$	88.58
40.3	85.42	0.0	0.00183	$8.24E{-}5$	88.58
40.4	85.43	0.0	0.00183	$8.18E{-}5$	88.58
40.5	85.44	0.0	0.00182	$8.12E{-}5$	88.59
40.6	85.45	0.0	0.00181	$8.06E{-}5$	88.59
40.7	85.46	0.0	0.0018	$8.0E-5$	88.59
40.8	85.47	0.0	0.00179	$7.94E{-}5$	88.6
40.9	85.49	0.0	0.00178	$7.88E{-}5$	88.6
41	85.5	0.0	0.00177	$7.82E{-}5$	88.6
41.1	85.51	0.0	0.00176	$7.77E{-}5$	88.61
41.2	85.52	0.0	0.00176	$7.71E{-}5$	88.61
41.3	85.53	0.0	0.00175	$7.66E{-}5$	88.61
41.4	85.54	0.0	0.00174	$7.6E-5$	88.62
41.5	85.55	0.0	0.00173	$7.55E{-}5$	88.62
41.6	85.56	0.0	0.00172	$7.49E{-}5$	88.62
41.7	85.57	0.0	0.00171	$7.44E{-}5$	88.63
41.8	85.57	0.0	0.00171	$7.39E{-}5$	88.63
41.9	85.58	0.0	0.0017	$7.33E{-}5$	88.63
42	85.59	0.0	0.00169	$7.28E{-}5$	88.64
42.1	85.6	0.0	0.00168	$7.23E{-}5$	88.64
42.2	85.61	0.0	0.00167	$7.18E{-}5$	88.64
42.3	85.62	0.0	0.00167	$7.13E{-}5$	88.65
42.4	85.63	0.0	0.00166	$7.08E{-}5$	88.65

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
42.5	85.64	0.0	0.00165	$7.03E{-}5$	88.65
42.6	85.65	0.0	0.00164	$6.98E{-}5$	88.66
42.7	85.66	0.0	0.00163	$6.93E{-}5$	88.66
42.8	85.67	0.0	0.00163	$6.88E{-}5$	88.66
42.9	85.68	0.0	0.00162	$6.84E{-}5$	88.66
43	85.69	0.0	0.00161	$6.79E{-}5$	88.67
43.1	85.7	0.0	0.0016	$6.74E{-}5$	88.67
43.2	85.71	0.0	0.0016	$6.7E-5$	88.67
43.3	85.72	0.0	0.00159	$6.65E{-}5$	88.68
43.4	85.73	0.0	0.00158	$6.6E-5$	88.68
43.5	85.73	0.0	0.00158	$6.56E{-}5$	88.68
43.6	85.74	0.0	0.00157	$6.51E{-}5$	88.69
43.7	85.75	0.0	0.00156	$6.47E{-}5$	88.69
43.8	85.76	0.0	0.00155	$6.43E{-}5$	88.69
43.9	85.77	0.0	0.00155	$6.38E{-}5$	88.7
44	85.78	0.0	0.00154	$6.34E{-}5$	88.7
44.1	85.79	0.0	0.00153	$6.3E-5$	88.7
44.2	85.8	0.0	0.00153	$6.25E{-}5$	88.7
44.3	85.81	0.0	0.00152	$6.21E{-}5$	88.71
44.4	85.81	0.0	0.00151	$6.17E{-}5$	88.71
44.5	85.82	0.0	0.00151	$6.13E{-}5$	88.71
44.6	85.83	0.0	0.0015	$6.09E{-}5$	88.72
44.7	85.84	0.0	0.00149	$6.05E{-}5$	88.72
44.8	85.85	0.0	0.00149	$6.01E{-}5$	88.72
44.9	85.86	0.0	0.00148	$5.97E{-}5$	88.72
45	85.87	0.0	0.00147	$5.93E{-}5$	88.73
45.1	85.87	0.0	0.00147	$5.89E{-}5$	88.73
45.2	85.88	0.0	0.00146	$5.85E{-}5$	88.73
45.3	85.89	0.0	0.00145	$5.81E{-}5$	88.74
45.4	85.9	0.0	0.00145	$5.77E{-}5$	88.74
45.5	85.91	0.0	0.00144	$5.74E{-}5$	88.74
45.6	85.92	0.0	0.00143	$5.7E-5$	88.74
45.7	85.92	0.0	0.00143	$5.66E{-}5$	88.75

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
45.8	85.93	0.0	0.00142	$5.63E{-}5$	88.75
45.9	85.94	0.0	0.00141	$5.59E{-}5$	88.75
46	85.95	0.0	0.00141	$5.55E{-}5$	88.75
46.1	85.96	0.0	0.0014	$5.52E{-}5$	88.76
46.2	85.96	0.0	0.0014	$5.48E{-}5$	88.76
46.3	85.97	0.0	0.00139	$5.45E{-}5$	88.76
46.4	85.98	0.0	0.00138	$5.41E{-}5$	88.77
46.5	85.99	0.0	0.00138	$5.38E{-}5$	88.77
46.6	86	0.0	0.00137	$5.34E{-}5$	88.77
46.7	86	0.0	0.00137	$5.31E{-}5$	88.77
46.8	86.01	0.0	0.00136	$5.27E{-}5$	88.78
46.9	86.02	0.0	0.00136	$5.24E{-}5$	88.78
47	86.03	0.0	0.00135	$5.21E{-}5$	88.78
47.1	86.03	0.0	0.00134	$5.18E{-}5$	88.78
47.2	86.04	0.0	0.00134	$5.14E{-}5$	88.79
47.3	86.05	0.0	0.00133	$5.11E{-}5$	88.79
47.4	86.06	0.0	0.00133	$5.08E{-}5$	88.79
47.5	86.07	0.0	0.00132	$5.05E{-}5$	88.79
47.6	86.07	0.0	0.00132	$5.01E{-}5$	88.8
47.7	86.08	0.0	0.00131	$4.98E{-}5$	88.8
47.8	86.09	0.0	0.0013	$4.95E{-}5$	88.8
47.9	86.1	0.0	0.0013	$4.92E{-}5$	88.8
48	86.1	0.0	0.00129	$4.89E{-}5$	88.81
48.1	86.11	0.0	0.00129	$4.86E{-}5$	88.81
48.2	86.12	0.0	0.00128	$4.83E{-}5$	88.81
48.3	86.12	0.0	0.00128	$4.8E-5$	88.81
48.4	86.13	0.0	0.00127	$4.77E{-}5$	88.82
48.5	86.14	0.0	0.00127	$4.74E{-}5$	88.82
48.6	86.15	0.0	0.00126	$4.71E{-}5$	88.82
48.7	86.15	0.0	0.00126	$4.68E{-}5$	88.82
48.8	86.16	0.0	0.00125	$4.66E{-}5$	88.83
48.9	86.17	0.0	0.00125	$4.63E{-}5$	88.83
49	86.18	0.0	0.00124	$4.6E-5$	88.83

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
49.1	86.18	0.0	0.00124	$4.57E{-}5$	88.83
49.2	86.19	0.0	0.00123	$4.54E{-}5$	88.84
49.3	86.2	0.0	0.00123	$4.52E{-}5$	88.84
49.4	86.2	0.0	0.00122	$4.49E{-}5$	88.84
49.5	86.21	0.0	0.00122	$4.46E{-}5$	88.84
49.6	86.22	0.0	0.00121	$4.44E{-}5$	88.84
49.7	86.22	0.0	0.00121	$4.41E{-}5$	88.85
49.8	86.23	0.0	0.0012	$4.38E{-}5$	88.85
49.9	86.24	0.0	0.0012	$4.36E{-}5$	88.85
50	86.24	0.0	0.00119	$4.33E{-}5$	88.85
50.1	86.25	0.0	0.00119	$4.31E{-}5$	88.86
50.2	86.26	0.0	0.00118	$4.28E{-}5$	88.86
50.3	86.27	0.0	0.00118	$4.25E{-}5$	88.86
50.4	86.27	0.0	0.00117	$4.23E{-}5$	88.86
50.5	86.28	0.0	0.00117	$4.2E - 5$	88.87
50.6	86.29	0.0	0.00116	$4.18E{-}5$	88.87
50.7	86.29	0.0	0.00116	$4.15E{-}5$	88.87
50.8	86.3	0.0	0.00116	$4.13E{-}5$	88.87
50.9	86.31	0.0	0.00115	$4.11E{-}5$	88.87
51	86.31	0.0	0.00115	$4.08E{-}5$	88.88
51.1	86.32	0.0	0.00114	$4.06E{-}5$	88.88
51.2	86.32	0.0	0.00114	$4.04E{-}5$	88.88
51.3	86.33	0.0	0.00113	$4.01E{-}5$	88.88
51.4	86.34	0.0	0.00113	$3.99E{-}5$	88.89
51.5	86.34	0.0	0.00112	$3.97E{-}5$	88.89
51.6	86.35	0.0	0.00112	$3.94E{-}5$	88.89
51.7	86.36	0.0	0.00112	$3.92E{-}5$	88.89
51.8	86.36	0.0	0.00111	$3.9E - 5$	88.89
51.9	86.37	0.0	0.00111	$3.87E{-}5$	88.9
52	86.38	0.0	0.0011	$3.85E{-}5$	88.9
52.1	86.38	0.0	0.0011	$3.83E{-}5$	88.9
52.2	86.39	0.0	0.00109	$3.81E{-}5$	88.9
52.3	86.4	0.0	0.00109	$3.79E{-}5$	88.9

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
52.4	86.4	0.0	0.00109	$3.77E{-5}$	88.91
52.5	86.41	0.0	0.00108	$3.74E{-5}$	88.91
52.6	86.41	0.0	0.00108	$3.72E{-5}$	88.91
52.7	86.42	0.0	0.00107	$3.7E-5$	88.91
52.8	86.43	0.0	0.00107	$3.68E{-5}$	88.91
52.9	86.43	0.0	0.00107	$3.66E{-5}$	88.92
53	86.44	0.0	0.00106	$3.64E{-5}$	88.92
53.1	86.44	0.0	0.00106	$3.62E{-5}$	88.92
53.2	86.45	0.0	0.00105	$3.6E-5$	88.92
53.3	86.46	0.0	0.00105	$3.58E{-5}$	88.93
53.4	86.46	0.0	0.00105	$3.56E{-5}$	88.93
53.5	86.47	0.0	0.00104	$3.54E{-5}$	88.93
53.6	86.47	0.0	0.00104	$3.52E{-5}$	88.93
53.7	86.48	0.0	0.00103	$3.5E-5$	88.93
53.8	86.49	0.0	0.00103	$3.48E{-5}$	88.94
53.9	86.49	0.0	0.00103	$3.46E{-5}$	88.94
54	86.5	0.0	0.00102	$3.44E{-5}$	88.94
54.1	86.5	0.0	0.00102	$3.42E{-5}$	88.94
54.2	86.51	0.0	0.00102	$3.4E-5$	88.94
54.3	86.52	0.0	0.00101	$3.39E{-5}$	88.94
54.4	86.52	0.0	0.00101	$3.37E{-5}$	88.95
54.5	86.53	0.0	0.001	$3.35E{-5}$	88.95
54.6	86.53	0.0	0.001	$3.33E{-5}$	88.95
54.7	86.54	0.0	0.000997	$3.31E{-5}$	88.95
54.8	86.54	0.0	0.000993	$3.29E{-5}$	88.95
54.9	86.55	0.0	0.000989	$3.28E{-5}$	88.96
55	86.56	0.0	0.000986	$3.26E{-5}$	88.96
55.1	86.56	0.0	0.000982	$3.24E{-5}$	88.96
55.2	86.57	0.0	0.000979	$3.22E{-5}$	88.96
55.3	86.57	0.0	0.000975	$3.21E{-5}$	88.96
55.4	86.58	0.0	0.000972	$3.19E{-5}$	88.97
55.5	86.58	0.0	0.000968	$3.17E{-5}$	88.97
55.6	86.59	0.0	0.000965	$3.16E{-5}$	88.97

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
55.7	86.59	0.0	0.000961	$3.14E{-5}$	88.97
55.8	86.6	0.0	0.000958	$3.12E{-5}$	88.97
55.9	86.61	0.0	0.000954	$3.11E{-5}$	88.98
56	86.61	0.0	0.000951	$3.09E{-5}$	88.98
56.1	86.62	0.0	0.000948	$3.07E{-5}$	88.98
56.2	86.62	0.0	0.000944	$3.06E{-5}$	88.98
56.3	86.63	0.0	0.000941	$3.04E{-5}$	88.98
56.4	86.63	0.0	0.000938	$3.02E{-5}$	88.98
56.5	86.64	0.0	0.000934	$3.01E{-5}$	88.99
56.6	86.64	0.0	0.000931	$2.99E{-5}$	88.99
56.7	86.65	0.0	0.000928	$2.98E{-5}$	88.99
56.8	86.65	0.0	0.000924	$2.96E{-5}$	88.99
56.9	86.66	0.0	0.000921	$2.95E{-5}$	88.99
57	86.66	0.0	0.000918	$2.93E{-5}$	88.99
57.1	86.67	0.0	0.000915	$2.91E{-5}$	89
57.2	86.67	0.0	0.000912	$2.9E-5$	89
57.3	86.68	0.0	0.000908	$2.88E{-5}$	89
57.4	86.69	0.0	0.000905	$2.87E{-5}$	89
57.5	86.69	0.0	0.000902	$2.85E{-5}$	89
57.6	86.7	0.0	0.000899	$2.84E{-5}$	89.01
57.7	86.7	0.0	0.000896	$2.83E{-5}$	89.01
57.8	86.71	0.0	0.000893	$2.81E{-5}$	89.01
57.9	86.71	0.0	0.00089	$2.8E-5$	89.01
58	86.72	0.0	0.000887	$2.78E{-5}$	89.01
58.1	86.72	0.0	0.000884	$2.77E{-5}$	89.01
58.2	86.73	0.0	0.00088	$2.75E{-5}$	89.02
58.3	86.73	0.0	0.000877	$2.74E{-5}$	89.02
58.4	86.74	0.0	0.000874	$2.73E{-5}$	89.02
58.5	86.74	0.0	0.000871	$2.71E{-5}$	89.02
58.6	86.75	0.0	0.000869	$2.7E-5$	89.02
58.7	86.75	0.0	0.000866	$2.68E{-5}$	89.02
58.8	86.76	0.0	0.000863	$2.67E{-5}$	89.03
58.9	86.76	0.0	0.00086	$2.66E{-5}$	89.03

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
59	86.77	0.0	0.000857	$2.64E{-5}$	89.03
59.1	86.77	0.0	0.000854	$2.63E{-5}$	89.03
59.2	86.78	0.0	0.000851	$2.62E{-5}$	89.03
59.3	86.78	0.0	0.000848	$2.6E-5$	89.03
59.4	86.79	0.0	0.000845	$2.59E{-5}$	89.04
59.5	86.79	0.0	0.000842	$2.58E{-5}$	89.04
59.6	86.8	0.0	0.00084	$2.57E{-5}$	89.04
59.7	86.8	0.0	0.000837	$2.55E{-5}$	89.04
59.8	86.8	0.0	0.000834	$2.54E{-5}$	89.04
59.9	86.81	0.0	0.000831	$2.53E{-5}$	89.04
60	86.81	0.0	0.000829	$2.51E{-5}$	89.05
60.1	86.82	0.0	0.000826	$2.5E-5$	89.05
60.2	86.82	0.0	0.000823	$2.49E{-5}$	89.05
60.3	86.83	0.0	0.00082	$2.48E{-5}$	89.05
60.4	86.83	0.0	0.000818	$2.47E{-5}$	89.05
60.5	86.84	0.0	0.000815	$2.45E{-5}$	89.05
60.6	86.84	0.0	0.000812	$2.44E{-5}$	89.05
60.7	86.85	0.0	0.00081	$2.43E{-5}$	89.06
60.8	86.85	0.0	0.000807	$2.42E{-5}$	89.06
60.9	86.86	0.0	0.000804	$2.41E{-5}$	89.06
61	86.86	0.0	0.000802	$2.39E{-5}$	89.06
61.1	86.87	0.0	0.000799	$2.38E{-5}$	89.06
61.2	86.87	0.0	0.000796	$2.37E{-5}$	89.06
61.3	86.87	0.0	0.000794	$2.36E{-5}$	89.07
61.4	86.88	0.0	0.000791	$2.35E{-5}$	89.07
61.5	86.88	0.0	0.000789	$2.34E{-5}$	89.07
61.6	86.89	0.0	0.000786	$2.32E{-5}$	89.07
61.7	86.89	0.0	0.000784	$2.31E{-5}$	89.07
61.8	86.9	0.0	0.000781	$2.3E-5$	89.07
61.9	86.9	0.0	0.000778	$2.29E{-5}$	89.07
62	86.91	0.0	0.000776	$2.28E{-5}$	89.08
62.1	86.91	0.0	0.000773	$2.27E{-5}$	89.08
62.2	86.91	0.0	0.000771	$2.26E{-5}$	89.08

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
62.3	86.92	0.0	0.000769	$2.25E{-5}$	89.08
62.4	86.92	0.0	0.000766	$2.24E{-5}$	89.08
62.5	86.93	0.0	0.000764	$2.23E{-5}$	89.08
62.6	86.93	0.0	0.000761	$2.22E{-5}$	89.08
62.7	86.94	0.0	0.000759	$2.21E{-5}$	89.09
62.8	86.94	0.0	0.000756	$2.19E{-5}$	89.09
62.9	86.95	0.0	0.000754	$2.18E{-5}$	89.09
63	86.95	0.0	0.000752	$2.17E{-5}$	89.09
63.1	86.95	0.0	0.000749	$2.16E{-5}$	89.09
63.2	86.96	0.0	0.000747	$2.15E{-5}$	89.09
63.3	86.96	0.0	0.000744	$2.14E{-5}$	89.09
63.4	86.97	0.0	0.000742	$2.13E{-5}$	89.1
63.5	86.97	0.0	0.00074	$2.12E{-5}$	89.1
63.6	86.98	0.0	0.000737	$2.11E{-5}$	89.1
63.7	86.98	0.0	0.000735	$2.1E-5$	89.1
63.8	86.98	0.0	0.000733	$2.09E{-5}$	89.1
63.9	86.99	0.0	0.000731	$2.08E{-5}$	89.1
64	86.99	0.0	0.000728	$2.07E{-5}$	89.1
64.1	87	0.0	0.000726	$2.06E{-5}$	89.11
64.2	87	0.0	0.000724	$2.05E{-5}$	89.11
64.3	87	0.0	0.000721	$2.05E{-5}$	89.11
64.4	87.01	0.0	0.000719	$2.04E{-5}$	89.11
64.5	87.01	0.0	0.000717	$2.03E{-5}$	89.11
64.6	87.02	0.0	0.000715	$2.02E{-5}$	89.11
64.7	87.02	0.0	0.000713	$2.01E{-5}$	89.11
64.8	87.03	0.0	0.00071	$2.0E-5$	89.12
64.9	87.03	0.0	0.000708	$1.99E{-5}$	89.12
65	87.03	0.0	0.000706	$1.98E{-5}$	89.12
65.1	87.04	0.0	0.000704	$1.97E{-5}$	89.12
65.2	87.04	0.0	0.000702	$1.96E{-5}$	89.12
65.3	87.05	0.0	0.0007	$1.95E{-5}$	89.12
65.4	87.05	0.0	0.000697	$1.94E{-5}$	89.12
65.5	87.05	0.0	0.000695	$1.94E{-5}$	89.13

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{P}{P_0}$	$\frac{T}{T_0}$	$\frac{\rho}{\rho_0}$	μ
65.6	87.06	0.0	0.000693	$1.93E{-5}$	89.13
65.7	87.06	0.0	0.000691	$1.92E{-5}$	89.13
65.8	87.07	0.0	0.000689	$1.91E{-5}$	89.13
65.9	87.07	0.0	0.000687	$1.9E-5$	89.13
66	87.07	0.0	0.000685	$1.89E{-5}$	89.13
66.1	87.08	0.0	0.000683	$1.88E{-5}$	89.13
66.2	87.08	0.0	0.000681	$1.88E{-5}$	89.13
66.3	87.08	0.0	0.000679	$1.87E{-5}$	89.14
66.4	87.09	0.0	0.000677	$1.86E{-5}$	89.14
66.5	87.09	0.0	0.000675	$1.85E{-5}$	89.14
66.6	87.1	0.0	0.000673	$1.84E{-5}$	89.14
66.7	87.1	0.0	0.000671	$1.83E{-5}$	89.14
66.8	87.1	0.0	0.000669	$1.83E{-5}$	89.14
66.9	87.11	0.0	0.000667	$1.82E{-5}$	89.14
67	87.11	0.0	0.000665	$1.81E{-5}$	89.14
67.1	87.12	0.0	0.000663	$1.8E-5$	89.15
67.2	87.12	0.0	0.000661	$1.79E{-5}$	89.15
67.3	87.12	0.0	0.000659	$1.79E{-5}$	89.15
67.4	87.13	0.0	0.000657	$1.78E{-5}$	89.15
67.5	87.13	0.0	0.000655	$1.77E{-5}$	89.15
67.6	87.13	0.0	0.000653	$1.76E{-5}$	89.15
67.7	87.14	0.0	0.000651	$1.75E{-5}$	89.15
67.8	87.14	0.0	0.000649	$1.75E{-5}$	89.15
67.9	87.15	0.0	0.000647	$1.74E{-5}$	89.16
68	87.15	0.0	0.000645	$1.73E{-5}$	89.16
68.1	87.15	0.0	0.000643	$1.72E{-5}$	89.16
68.2	87.16	0.0	0.000641	$1.72E{-5}$	89.16
68.3	87.16	0.0	0.000639	$1.71E{-5}$	89.16
68.4	87.16	0.0	0.000638	$1.7E-5$	89.16
68.5	87.17	0.0	0.000636	$1.69E{-5}$	89.16
68.6	87.17	0.0	0.000634	$1.69E{-5}$	89.16
68.7	87.17	0.0	0.000632	$1.68E{-5}$	89.17
68.8	87.18	0.0	0.00063	$1.67E{-5}$	89.17

Table 7.4: Prandtl-Meyer function for k=1.67 (continue)

M	ν	$\frac{\mathbf{P}}{\mathbf{P_0}}$	$\frac{\mathbf{T}}{\mathbf{T_0}}$	$\frac{\rho}{\rho_0}$	μ
68.9	87.18	0.0	0.000628	$1.66E{-5}$	89.17
69	87.19	0.0	0.000627	$1.66E{-5}$	89.17
69.1	87.19	0.0	0.000625	$1.65E{-5}$	89.17
69.2	87.19	0.0	0.000623	$1.64E{-5}$	89.17
69.3	87.2	0.0	0.000621	$1.64E{-5}$	89.17
69.4	87.2	0.0	0.000619	$1.63E{-5}$	89.17
69.5	87.2	0.0	0.000618	$1.62E{-5}$	89.18
69.6	87.21	0.0	0.000616	$1.61E{-5}$	89.18
69.7	87.21	0.0	0.000614	$1.61E{-5}$	89.18
69.8	87.21	0.0	0.000612	$1.6E - 5$	89.18
69.9	87.22	0.0	0.000611	$1.59E{-5}$	89.18
70	87.22	0.0	0.000609	$1.59E{-5}$	89.18

Chapter 8

Oblique Shock

The amount of information for oblique shock to be presented is extremely large. For example in NASA report tn-d-2221 is over 150 pages when the mesh is about medium density. Even slight increase of the mesh will run the page to extremely large amount. To combat this problem, information that depends on one parameter is tabulated while the two–parameters information is presented in figures so the usefulness is not lost.

8.1 Values at the Deflection Point

8.1.1 Deflection Point for k=1.2

Table 8.1: Deflection points for k=1.2

M_x	M_y	δ_{max}	θ_{max}
1.	1.	?.	?.
1.01	0.99671	0.05631	85.3600
1.02	0.9935	0.15814	83.4913
1.03	0.99038	0.28846	82.0929
1.04	0.98734	0.44096	80.9431
1.05	0.98438	0.61187	79.9552
1.06	0.9815	0.79858	79.0843
1.07	0.9787	0.99911	78.3033
1.08	0.97598	1.2119	77.5945

Table 8.1: Deflection points for k=1.2 (continue)

M_x	M_y	δ_{max}	θ_{max}
1.09	0.97334	1.4357	76.9456
1.1	0.97078	1.6693	76.3474
1.11	0.96829	1.9119	75.7928
1.12	0.96588	2.1626	75.2764
1.13	0.96354	2.4207	74.7939
1.14	0.96127	2.6855	74.3415
1.15	0.95908	2.9565	73.9164
1.16	0.95695	3.2331	73.5160
1.17	0.9549	3.5147	73.1381
1.18	0.95291	3.801	72.7809
1.19	0.95099	4.0916	72.4428
1.2	0.94913	4.386	72.1222
1.21	0.94735	4.6839	71.8181
1.22	0.94562	4.9849	71.5291
1.23	0.94395	5.2887	71.2545
1.24	0.94235	5.5951	70.9931
1.25	0.94081	5.9037	70.7444
1.26	0.93932	6.2143	70.5073
1.27	0.9379	6.5266	70.2815
1.28	0.93652	6.8404	70.0661
1.29	0.93521	7.1556	69.8606
1.3	0.93394	7.4718	69.6645
1.31	0.93273	7.7888	69.4774
1.32	0.93157	8.1066	69.2987
1.33	0.93047	8.4249	69.1281
1.34	0.92941	8.7435	68.9651
1.35	0.92839	9.0624	68.8095
1.36	0.92743	9.3813	68.6608
1.37	0.92651	9.7001	68.5188
1.38	0.92563	10.0186	68.3831
1.39	0.9248	10.3368	68.2535
1.4	0.924	10.6546	68.1298
1.41	0.92325	10.9717	68.0116

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
1.42	0.92254	11.2882	67.8987
1.43	0.92187	11.6039	67.7910
1.44	0.92124	11.9187	67.6881
1.45	0.92064	12.2325	67.5900
1.46	0.92008	12.5453	67.4964
1.47	0.91955	12.8569	67.4071
1.48	0.91906	13.1673	67.3220
1.49	0.9186	13.4764	67.2409
1.5	0.91817	13.7842	67.1637
1.51	0.91777	14.0905	67.0902
1.52	0.9174	14.3954	67.0202
1.53	0.91706	14.6987	66.9537
1.54	0.91675	15.0005	66.8905
1.55	0.91647	15.3006	66.8305
1.56	0.91621	15.5991	66.7735
1.57	0.91598	15.8959	66.7195
1.58	0.91577	16.1909	66.6683
1.59	0.91559	16.4841	66.6199
1.6	0.91543	16.7755	66.5742
1.61	0.91529	17.065	66.5310
1.62	0.91518	17.3527	66.4902
1.63	0.91508	17.6385	66.4519
1.64	0.91501	17.9223	66.4158
1.65	0.91495	18.2042	66.3819
1.66	0.91491	18.4841	66.3502
1.67	0.91489	18.762	66.3205
1.68	0.91489	19.038	66.2928
1.69	0.91491	19.3119	66.2670
1.7	0.91494	19.5838	66.2431
1.71	0.91499	19.8537	66.2210
1.72	0.91505	20.1215	66.2006
1.73	0.91513	20.3873	66.1818
1.74	0.91522	20.651	66.1647

Table 8.1: Deflection points for k=1.2 (continue)

M_x	M_y	δ_{max}	θ_{max}
1.75	0.91533	20.9127	66.1491
1.76	0.91545	21.1723	66.1350
1.77	0.91558	21.4298	66.1224
1.78	0.91572	21.6853	66.1111
1.79	0.91587	21.9386	66.1012
1.8	0.91604	22.19	66.0926
1.81	0.91621	22.4392	66.0853
1.82	0.9164	22.6865	66.0791
1.83	0.91659	22.9316	66.0742
1.84	0.9168	23.1747	66.0703
1.85	0.91701	23.4158	66.0676
1.86	0.91723	23.6548	66.0659
1.87	0.91746	23.8918	66.0652
1.88	0.9177	24.1267	66.0655
1.89	0.91795	24.3597	66.0668
1.9	0.9182	24.5906	66.0689
1.91	0.91846	24.8195	66.0720
1.92	0.91873	25.0465	66.0759
1.93	0.919	25.2714	66.0806
1.94	0.91927	25.4944	66.0861
1.95	0.91956	25.7155	66.0924
1.96	0.91985	25.9346	66.0994
1.97	0.92014	26.1518	66.1071
1.98	0.92044	26.367	66.1155
1.99	0.92074	26.5803	66.1245
2.	0.92105	26.7918	66.1342
2.02	0.92167	27.209	66.1553
2.04	0.92231	27.6188	66.1788
2.06	0.92296	28.0213	66.2043
2.08	0.92362	28.4166	66.2318
2.1	0.92429	28.8048	66.2610
2.12	0.92497	29.1861	66.2919
2.14	0.92566	29.5605	66.3244

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
2.16	0.92635	29.9281	66.3582
2.18	0.92704	30.2891	66.3934
2.2	0.92774	30.6437	66.4297
2.22	0.92844	30.9918	66.4671
2.24	0.92914	31.3337	66.5055
2.26	0.92985	31.6694	66.5448
2.28	0.93055	31.9991	66.5849
2.3	0.93125	32.3229	66.6257
2.32	0.93195	32.6409	66.6672
2.34	0.93265	32.9532	66.7094
2.36	0.93335	33.2599	66.7520
2.38	0.93404	33.5612	66.7951
2.4	0.93473	33.8571	66.8387
2.42	0.93542	34.1478	66.8826
2.44	0.9361	34.4333	66.9268
2.46	0.93678	34.7138	66.9712
2.48	0.93745	34.9893	67.0159
2.5	0.93812	35.26	67.0608
2.52	0.93878	35.526	67.1058
2.54	0.93944	35.7874	67.1509
2.56	0.94009	36.0442	67.1961
2.58	0.94074	36.2965	67.2414
2.6	0.94138	36.5445	67.2866
2.62	0.94201	36.7883	67.3318
2.64	0.94264	37.0278	67.3770
2.66	0.94326	37.2633	67.4221
2.68	0.94387	37.4947	67.4671
2.7	0.94448	37.7223	67.5121
2.72	0.94508	37.9459	67.5568
2.74	0.94568	38.1659	67.6015
2.76	0.94626	38.3821	67.6460
2.78	0.94684	38.5947	67.6903
2.8	0.94742	38.8038	67.7344

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
2.82	0.94799	39.0094	67.7782
2.84	0.94855	39.2116	67.8219
2.86	0.9491	39.4105	67.8654
2.88	0.94965	39.6061	67.9085
2.9	0.95019	39.7986	67.9515
2.92	0.95072	39.9879	67.9942
2.94	0.95125	40.1741	68.0366
2.96	0.95177	40.3574	68.0787
2.98	0.95228	40.5377	68.1206
3.	0.95279	40.7151	68.1622
3.02	0.95329	40.8897	68.2034
3.04	0.95378	41.0615	68.2444
3.06	0.95427	41.2307	68.2851
3.08	0.95475	41.3971	68.3254
3.1	0.95523	41.561	68.3655
3.12	0.9557	41.7223	68.4052
3.14	0.95616	41.8811	68.4446
3.16	0.95662	42.0374	68.4837
3.18	0.95707	42.1913	68.5225
3.2	0.95751	42.3429	68.5609
3.22	0.95795	42.4922	68.5990
3.24	0.95838	42.6392	68.6368
3.26	0.95881	42.7839	68.6743
3.28	0.95923	42.9265	68.7114
3.3	0.95965	43.067	68.7482
3.32	0.96006	43.2053	68.7847
3.34	0.96047	43.3416	68.8209
3.36	0.96086	43.4759	68.8567
3.38	0.96126	43.6082	68.8922
3.4	0.96165	43.7385	68.9274
3.42	0.96203	43.8669	68.9622
3.44	0.96241	43.9935	68.9967
3.46	0.96279	44.1182	69.0309

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
3.48	0.96315	44.2411	69.0648
3.5	0.96352	44.3623	69.0984
3.52	0.96388	44.4817	69.1316
3.54	0.96423	44.5994	69.1645
3.56	0.96458	44.7154	69.1971
3.58	0.96493	44.8298	69.2294
3.6	0.96527	44.9426	69.2614
3.62	0.9656	45.0538	69.2931
3.64	0.96593	45.1634	69.3244
3.66	0.96626	45.2715	69.3555
3.68	0.96658	45.3781	69.3862
3.7	0.9669	45.4833	69.4167
3.72	0.96722	45.587	69.4468
3.74	0.96753	45.6892	69.4767
3.76	0.96783	45.7901	69.5062
3.78	0.96814	45.8896	69.5355
3.8	0.96844	45.9877	69.5645
3.82	0.96873	46.0846	69.5932
3.84	0.96902	46.1801	69.6216
3.86	0.96931	46.2743	69.6497
3.88	0.96959	46.3673	69.6776
3.9	0.96987	46.4591	69.7051
3.92	0.97015	46.5496	69.7324
3.94	0.97042	46.639	69.7594
3.96	0.97069	46.7272	69.7862
3.98	0.97095	46.8142	69.8127
4.	0.97122	46.9001	69.8389
4.02	0.97148	46.9849	69.8649
4.04	0.97173	47.0686	69.8906
4.06	0.97198	47.1512	69.9160
4.08	0.97223	47.2327	69.9412
4.1	0.97248	47.3132	69.9661
4.12	0.97272	47.3927	69.9908

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
4.14	0.97296	47.4712	70.0153
4.16	0.9732	47.5487	70.0395
4.18	0.97343	47.6252	70.0634
4.2	0.97366	47.7007	70.0872
4.22	0.97389	47.7754	70.1106
4.24	0.97412	47.849	70.1339
4.26	0.97434	47.9218	70.1569
4.28	0.97456	47.9937	70.1797
4.3	0.97478	48.0647	70.2023
4.32	0.97499	48.1348	70.2246
4.34	0.97521	48.2041	70.2467
4.36	0.97542	48.2725	70.2686
4.38	0.97562	48.3401	70.2903
4.4	0.97583	48.4069	70.3118
4.42	0.97603	48.4728	70.3330
4.44	0.97623	48.538	70.3541
4.46	0.97643	48.6024	70.3749
4.48	0.97662	48.6661	70.3956
4.5	0.97681	48.7289	70.4160
4.52	0.977	48.7911	70.4362
4.54	0.97719	48.8525	70.4563
4.56	0.97738	48.9132	70.4761
4.58	0.97756	48.9732	70.4957
4.6	0.97774	49.0325	70.5152
4.62	0.97792	49.0911	70.5345
4.64	0.9781	49.149	70.5535
4.66	0.97828	49.2062	70.5724
4.68	0.97845	49.2628	70.5911
4.7	0.97862	49.3188	70.6097
4.72	0.97879	49.3741	70.6280
4.74	0.97896	49.4288	70.6462
4.76	0.97912	49.4829	70.6642
4.78	0.97929	49.5363	70.6820

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
4.8	0.97945	49.5892	70.6996
4.82	0.97961	49.6414	70.7171
4.84	0.97977	49.6931	70.7344
4.86	0.97992	49.7442	70.7516
4.88	0.98008	49.7948	70.7686
4.9	0.98023	49.8447	70.7854
4.92	0.98038	49.8942	70.8021
4.94	0.98053	49.9431	70.8186
4.96	0.98068	49.9914	70.8349
4.98	0.98083	50.0393	70.8511
5.	0.98097	50.0866	70.8671
5.04	0.98126	50.1797	70.8988
5.08	0.98153	50.2707	70.9298
5.12	0.98181	50.3599	70.9603
5.16	0.98207	50.4472	70.9902
5.2	0.98233	50.5326	71.0195
5.24	0.98259	50.6163	71.0483
5.28	0.98284	50.6983	71.0766
5.32	0.98308	50.7785	71.1044
5.36	0.98332	50.8571	71.1316
5.4	0.98356	50.9341	71.1584
5.44	0.98379	51.0096	71.1847
5.48	0.98401	51.0836	71.2105
5.52	0.98424	51.156	71.2358
5.56	0.98445	51.2271	71.2607
5.6	0.98466	51.2967	71.2852
5.64	0.98487	51.365	71.3092
5.68	0.98507	51.4319	71.3328
5.72	0.98527	51.4976	71.3560
5.76	0.98547	51.562	71.3788
5.8	0.98566	51.6252	71.4012
5.84	0.98585	51.6871	71.4232
5.88	0.98604	51.7479	71.4448

Table 8.1: Deflection points for k=1.2 (continue)

M_x	M_y	δ_{max}	θ_{max}
5.92	0.98622	51.8076	71.4661
5.96	0.98639	51.8661	71.4870
6.	0.98657	51.9236	71.5075
6.04	0.98674	51.98	71.5277
6.08	0.98691	52.0354	71.5475
6.12	0.98707	52.0897	71.5671
6.16	0.98723	52.1431	71.5863
6.2	0.98739	52.1955	71.6051
6.24	0.98755	52.247	71.6237
6.28	0.9877	52.2976	71.6420
6.32	0.98785	52.3472	71.6599
6.36	0.988	52.396	71.6776
6.4	0.98814	52.4439	71.6950
6.44	0.98829	52.491	71.7121
6.48	0.98843	52.5373	71.7289
6.52	0.98856	52.5828	71.7454
6.56	0.9887	52.6275	71.7617
6.6	0.98883	52.6715	71.7778
6.64	0.98896	52.7147	71.7936
6.68	0.98909	52.7571	71.8091
6.72	0.98921	52.7989	71.8244
6.76	0.98934	52.84	71.8394
6.8	0.98946	52.8803	71.8542
6.84	0.98958	52.9201	71.8688
6.88	0.9897	52.9591	71.8832
6.92	0.98981	52.9975	71.8973
6.96	0.98993	53.0353	71.9112
7.	0.99004	53.0725	71.9250
7.04	0.99015	53.1091	71.9385
7.08	0.99026	53.1451	71.9518
7.12	0.99036	53.1806	71.9649
7.16	0.99047	53.2154	71.9778
7.2	0.99057	53.2498	71.9905

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
7.24	0.99067	53.2835	72.0030
7.28	0.99077	53.3168	72.0154
7.32	0.99087	53.3495	72.0275
7.36	0.99097	53.3818	72.0395
7.4	0.99106	53.4135	72.0513
7.44	0.99116	53.4448	72.0629
7.48	0.99125	53.4755	72.0744
7.52	0.99134	53.5058	72.0857
7.56	0.99143	53.5357	72.0968
7.6	0.99152	53.5651	72.1078
7.64	0.9916	53.5941	72.1187
7.68	0.99169	53.6226	72.1293
7.72	0.99177	53.6507	72.1398
7.76	0.99186	53.6784	72.1502
7.8	0.99194	53.7057	72.1605
7.84	0.99202	53.7326	72.1705
7.88	0.9921	53.7591	72.1805
7.92	0.99218	53.7852	72.1903
7.96	0.99225	53.811	72.2000
8.	0.99233	53.8364	72.2095
8.04	0.9924	53.8614	72.2189
8.08	0.99248	53.886	72.2282
8.12	0.99255	53.9103	72.2374
8.16	0.99262	53.9343	72.2464
8.2	0.99269	53.9579	72.2553
8.24	0.99276	53.9813	72.2641
8.28	0.99283	54.0042	72.2728
8.32	0.9929	54.0269	72.2814
8.36	0.99296	54.0493	72.2898
8.4	0.99303	54.0713	72.2982
8.44	0.99309	54.0931	72.3064
8.48	0.99316	54.1145	72.3145
8.52	0.99322	54.1357	72.3225

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
8.56	0.99328	54.1565	72.3304
8.6	0.99334	54.1771	72.3383
8.64	0.99341	54.1975	72.3460
8.68	0.99346	54.2175	72.3536
8.72	0.99352	54.2373	72.3611
8.76	0.99358	54.2568	72.3685
8.8	0.99364	54.2761	72.3759
8.84	0.9937	54.2951	72.3831
8.88	0.99375	54.3139	72.3902
8.92	0.99381	54.3324	72.3973
8.96	0.99386	54.3507	72.4043
9.	0.99391	54.3688	72.4111
9.04	0.99397	54.3866	72.4179
9.08	0.99402	54.4042	72.4246
9.12	0.99407	54.4216	72.4313
9.16	0.99412	54.4387	72.4378
9.2	0.99417	54.4557	72.4443
9.24	0.99422	54.4724	72.4507
9.28	0.99427	54.4889	72.4570
9.32	0.99432	54.5052	72.4632
9.36	0.99437	54.5213	72.4694
9.4	0.99441	54.5372	72.4755
9.44	0.99446	54.553	72.4815
9.48	0.99451	54.5685	72.4874
9.52	0.99455	54.5838	72.4933
9.56	0.9946	54.599	72.4991
9.6	0.99464	54.6139	72.5049
9.64	0.99469	54.6287	72.5105
9.68	0.99473	54.6433	72.5161
9.72	0.99477	54.6578	72.5217
9.76	0.99481	54.672	72.5272
9.8	0.99486	54.6861	72.5326
9.84	0.9949	54.7001	72.5379

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
9.88	0.99494	54.7138	72.5432
9.92	0.99498	54.7274	72.5484
9.96	0.99502	54.7409	72.5536
10.	0.99506	54.7542	72.5587
10.1	0.99515	54.7867	72.5713
10.2	0.99525	54.8183	72.5834
10.3	0.99534	54.8491	72.5953
10.4	0.99543	54.8789	72.6068
10.5	0.99551	54.908	72.6180
10.6	0.9956	54.9362	72.6289
10.7	0.99568	54.9637	72.6396
10.8	0.99576	54.9905	72.6499
10.9	0.99583	55.0165	72.6600
11.	0.99591	55.0418	72.6698
11.1	0.99598	55.0665	72.6793
11.2	0.99605	55.0905	72.6887
11.3	0.99612	55.1139	72.6977
11.4	0.99619	55.1367	72.7066
11.5	0.99625	55.159	72.7152
11.6	0.99632	55.1806	72.7236
11.7	0.99638	55.2018	72.7319
11.8	0.99644	55.2224	72.7399
11.9	0.9965	55.2425	72.7477
12.	0.99656	55.2621	72.7553
12.1	0.99661	55.2812	72.7628
12.2	0.99667	55.2999	72.7701
12.3	0.99672	55.3181	72.7772
12.4	0.99677	55.3359	72.7841
12.5	0.99682	55.3533	72.7909
12.6	0.99687	55.3703	72.7975
12.7	0.99692	55.3869	72.8040
12.8	0.99697	55.4031	72.8103
12.9	0.99702	55.4189	72.8165

Table 8.1: Deflection points for k=1.2 (continue)

M_x	M_y	δ_{max}	θ_{max}
13.	0.99706	55.4344	72.8226
13.1	0.99711	55.4495	72.8285
13.2	0.99715	55.4643	72.8343
13.3	0.99719	55.4788	72.8399
13.4	0.99723	55.4929	72.8455
13.5	0.99727	55.5068	72.8509
13.6	0.99731	55.5203	72.8562
13.7	0.99735	55.5336	72.8614
13.8	0.99739	55.5465	72.8665
13.9	0.99743	55.5592	72.8714
14.	0.99746	55.5717	72.8763
14.1	0.9975	55.5838	72.8811
14.2	0.99753	55.5958	72.8858
14.3	0.99757	55.6074	72.8903
14.4	0.9976	55.6189	72.8948
14.5	0.99763	55.6301	72.8992
14.6	0.99767	55.641	72.9035
14.7	0.9977	55.6518	72.9078
14.8	0.99773	55.6623	72.9119
14.9	0.99776	55.6727	72.9160
15.	0.99779	55.6828	72.9200
15.1	0.99782	55.6927	72.9239
15.2	0.99785	55.7025	72.9277
15.3	0.99787	55.712	72.9315
15.4	0.9979	55.7214	72.9351
15.5	0.99793	55.7306	72.9388
15.6	0.99795	55.7396	72.9423
15.7	0.99798	55.7484	72.9458
15.8	0.99801	55.7571	72.9492
15.9	0.99803	55.7656	72.9526
16.	0.99806	55.774	72.9559
16.1	0.99808	55.7822	72.9591
16.2	0.9981	55.7903	72.9623

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
16.3	0.99813	55.7982	72.9654
16.4	0.99815	55.8059	72.9684
16.5	0.99817	55.8136	72.9715
16.6	0.99819	55.8211	72.9744
16.7	0.99821	55.8284	72.9773
16.8	0.99824	55.8357	72.9802
16.9	0.99826	55.8428	72.9830
17.	0.99828	55.8497	72.9857
17.1	0.9983	55.8566	72.9884
17.2	0.99832	55.8633	72.9911
17.3	0.99834	55.87	72.9937
17.4	0.99835	55.8765	72.9963
17.5	0.99837	55.8829	72.9988
17.6	0.99839	55.8892	73.0013
17.7	0.99841	55.8954	73.0037
17.8	0.99843	55.9015	73.0062
17.9	0.99844	55.9074	73.0085
18.	0.99846	55.9133	73.0108
18.1	0.99848	55.9191	73.0131
18.2	0.9985	55.9248	73.0154
18.3	0.99851	55.9304	73.0176
18.4	0.99853	55.9359	73.0198
18.5	0.99854	55.9414	73.0219
18.6	0.99856	55.9467	73.0240
18.7	0.99857	55.952	73.0261
18.8	0.99859	55.9571	73.0282
18.9	0.9986	55.9622	73.0302
19.	0.99862	55.9672	73.0322
19.1	0.99863	55.9722	73.0341
19.2	0.99865	55.977	73.0360
19.3	0.99866	55.9818	73.0379
19.4	0.99868	55.9865	73.0398
19.5	0.99869	55.9912	73.0416

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
19.6	0.9987	55.9957	73.0434
19.7	0.99872	56.0002	73.0452
19.8	0.99873	56.0047	73.0470
19.9	0.99874	56.009	73.0487
20.	0.99875	56.0133	73.0504
20.1	0.99877	56.0176	73.0521
20.2	0.99878	56.0217	73.0538
20.3	0.99879	56.0259	73.0554
20.4	0.9988	56.0299	73.0570
20.5	0.99881	56.0339	73.0586
20.6	0.99882	56.0378	73.0601
20.7	0.99884	56.0417	73.0617
20.8	0.99885	56.0455	73.0632
20.9	0.99886	56.0493	73.0647
21.	0.99887	56.053	73.0662
21.1	0.99888	56.0567	73.0676
21.2	0.99889	56.0603	73.0690
21.3	0.9989	56.0639	73.0705
21.4	0.99891	56.0674	73.0719
21.5	0.99892	56.0709	73.0732
21.6	0.99893	56.0743	73.0746
21.7	0.99894	56.0776	73.0759
21.8	0.99895	56.081	73.0772
21.9	0.99896	56.0843	73.0785
22.	0.99897	56.0875	73.0798
22.1	0.99898	56.0907	73.0811
22.2	0.99899	56.0938	73.0823
22.3	0.999	56.0969	73.0836
22.4	0.99901	56.1	73.0848
22.5	0.99901	56.103	73.0860
22.6	0.99902	56.106	73.0872
22.7	0.99903	56.109	73.0883
22.8	0.99904	56.1119	73.0895

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
22.9	0.99905	56.1147	73.0906
23.	0.99906	56.1176	73.0918
23.1	0.99906	56.1204	73.0929
23.2	0.99907	56.1231	73.0940
23.3	0.99908	56.1259	73.0951
23.4	0.99909	56.1285	73.0961
23.5	0.9991	56.1312	73.0972
23.6	0.9991	56.1338	73.0982
23.7	0.99911	56.1364	73.0993
23.8	0.99912	56.139	73.1003
23.9	0.99913	56.1415	73.1013
24.	0.99913	56.144	73.1023
24.1	0.99914	56.1465	73.1032
24.2	0.99915	56.1489	73.1042
24.3	0.99915	56.1513	73.1052
24.4	0.99916	56.1537	73.1061
24.5	0.99917	56.156	73.1070
24.6	0.99918	56.1583	73.1080
24.7	0.99918	56.1606	73.1089
24.8	0.99919	56.1629	73.1098
24.9	0.9992	56.1651	73.1107
25.	0.9992	56.1673	73.1115
25.1	0.99921	56.1695	73.1124
25.2	0.99921	56.1717	73.1133
25.3	0.99922	56.1738	73.1141
25.4	0.99923	56.1759	73.1149
25.5	0.99923	56.178	73.1158
25.6	0.99924	56.18	73.1166
25.7	0.99924	56.1821	73.1174
25.8	0.99925	56.1841	73.1182
25.9	0.99926	56.1861	73.1190
26.	0.99926	56.188	73.1198
26.1	0.99927	56.19	73.1205

Table 8.1: Deflection points for k=1.2 (continue)

M_x	M_y	δ_{max}	θ_{max}
26.2	0.99927	56.1919	73.1213
26.3	0.99928	56.1938	73.1221
26.4	0.99928	56.1957	73.1228
26.5	0.99929	56.1975	73.1235
26.6	0.99929	56.1993	73.1243
26.7	0.9993	56.2012	73.1250
26.8	0.9993	56.203	73.1257
26.9	0.99931	56.2047	73.1264
27.	0.99932	56.2065	73.1271
27.1	0.99932	56.2082	73.1278
27.2	0.99933	56.2099	73.1285
27.3	0.99933	56.2116	73.1292
27.4	0.99933	56.2133	73.1298
27.5	0.99934	56.215	73.1305
27.6	0.99934	56.2166	73.1311
27.7	0.99935	56.2182	73.1318
27.8	0.99935	56.2198	73.1324
27.9	0.99936	56.2214	73.1331
28.	0.99936	56.223	73.1337
28.1	0.99937	56.2246	73.1343
28.2	0.99937	56.2261	73.1349
28.3	0.99938	56.2276	73.1355
28.4	0.99938	56.2291	73.1361
28.5	0.99939	56.2306	73.1367
28.6	0.99939	56.2321	73.1373
28.7	0.99939	56.2336	73.1379
28.8	0.9994	56.235	73.1385
28.9	0.9994	56.2364	73.1390
29.	0.99941	56.2379	73.1396
29.1	0.99941	56.2393	73.1402
29.2	0.99941	56.2406	73.1407
29.3	0.99942	56.242	73.1413
29.4	0.99942	56.2434	73.1418

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
29.5	0.99943	56.2447	73.1423
29.6	0.99943	56.246	73.1429
29.7	0.99943	56.2474	73.1434
29.8	0.99944	56.2487	73.1439
29.9	0.99944	56.25	73.1444
30.	0.99945	56.2512	73.1449
30.1	0.99945	56.2525	73.1454
30.2	0.99945	56.2538	73.1459
30.3	0.99946	56.255	73.1464
30.4	0.99946	56.2562	73.1469
30.5	0.99946	56.2575	73.1474
30.6	0.99947	56.2587	73.1479
30.7	0.99947	56.2599	73.1484
30.8	0.99947	56.261	73.1488
30.9	0.99948	56.2622	73.1493
31.	0.99948	56.2634	73.1498
31.1	0.99948	56.2645	73.1502
31.2	0.99949	56.2657	73.1507
31.3	0.99949	56.2668	73.1511
31.4	0.99949	56.2679	73.1516
31.5	0.9995	56.269	73.1520
31.6	0.9995	56.2701	73.1524
31.7	0.9995	56.2712	73.1529
31.8	0.99951	56.2723	73.1533
31.9	0.99951	56.2733	73.1537
32.	0.99951	56.2744	73.1541
32.1	0.99952	56.2754	73.1546
32.2	0.99952	56.2765	73.1550
32.3	0.99952	56.2775	73.1554
32.4	0.99952	56.2785	73.1558
32.5	0.99953	56.2795	73.1562
32.6	0.99953	56.2805	73.1566
32.7	0.99953	56.2815	73.1570

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
32.8	0.99954	56.2825	73.1574
32.9	0.99954	56.2834	73.1578
33.	0.99954	56.2844	73.1581
33.1	0.99954	56.2854	73.1585
33.2	0.99955	56.2863	73.1589
33.3	0.99955	56.2872	73.1593
33.4	0.99955	56.2882	73.1596
33.5	0.99955	56.2891	73.1600
33.6	0.99956	56.29	73.1604
33.7	0.99956	56.2909	73.1607
33.8	0.99956	56.2918	73.1611
33.9	0.99957	56.2927	73.1614
34.	0.99957	56.2936	73.1618
34.1	0.99957	56.2944	73.1621
34.2	0.99957	56.2953	73.1625
34.3	0.99958	56.2961	73.1628
34.4	0.99958	56.297	73.1632
34.5	0.99958	56.2978	73.1635
34.6	0.99958	56.2987	73.1638
34.7	0.99959	56.2995	73.1642
34.8	0.99959	56.3003	73.1645
34.9	0.99959	56.3011	73.1648
35.	0.99959	56.3019	73.1651
35.1	0.99959	56.3027	73.1655
35.2	0.9996	56.3035	73.1658
35.3	0.9996	56.3043	73.1661
35.4	0.9996	56.3051	73.1664
35.5	0.9996	56.3059	73.1667
35.6	0.99961	56.3066	73.1670
35.7	0.99961	56.3074	73.1673
35.8	0.99961	56.3081	73.1676
35.9	0.99961	56.3089	73.1679
36.	0.99961	56.3096	73.1682

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
36.1	0.99962	56.3104	73.1685
36.2	0.99962	56.3111	73.1688
36.3	0.99962	56.3118	73.1691
36.4	0.99962	56.3125	73.1694
36.5	0.99963	56.3132	73.1696
36.6	0.99963	56.314	73.1699
36.7	0.99963	56.3147	73.1702
36.8	0.99963	56.3153	73.1705
36.9	0.99963	56.316	73.1708
37.	0.99964	56.3167	73.1710
37.1	0.99964	56.3174	73.1713
37.2	0.99964	56.3181	73.1716
37.3	0.99964	56.3187	73.1718
37.4	0.99964	56.3194	73.1721
37.5	0.99964	56.32	73.1724
37.6	0.99965	56.3207	73.1726
37.7	0.99965	56.3213	73.1729
37.8	0.99965	56.322	73.1731
37.9	0.99965	56.3226	73.1734
38.	0.99965	56.3233	73.1736
38.1	0.99966	56.3239	73.1739
38.2	0.99966	56.3245	73.1741
38.3	0.99966	56.3251	73.1744
38.4	0.99966	56.3257	73.1746
38.5	0.99966	56.3263	73.1749
38.6	0.99966	56.3269	73.1751
38.7	0.99967	56.3275	73.1753
38.8	0.99967	56.3281	73.1756
38.9	0.99967	56.3287	73.1758
39.	0.99967	56.3293	73.1760
39.1	0.99967	56.3299	73.1763
39.2	0.99967	56.3304	73.1765
39.3	0.99968	56.331	73.1767

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
39.4	0.99968	56.3316	73.1770
39.5	0.99968	56.3321	73.1772
39.6	0.99968	56.3327	73.1774
39.7	0.99968	56.3332	73.1776
39.8	0.99968	56.3338	73.1778
39.9	0.99969	56.3343	73.1781
40.	0.99969	56.3349	73.1783
40.1	0.99969	56.3354	73.1785
40.2	0.99969	56.3359	73.1787
40.3	0.99969	56.3365	73.1789
40.4	0.99969	56.337	73.1791
40.5	0.9997	56.3375	73.1793
40.6	0.9997	56.338	73.1795
40.7	0.9997	56.3385	73.1797
40.8	0.9997	56.3391	73.1799
40.9	0.9997	56.3396	73.1801
41.	0.9997	56.3401	73.1803
41.1	0.9997	56.3406	73.1805
41.2	0.99971	56.3411	73.1807
41.3	0.99971	56.3415	73.1809
41.4	0.99971	56.342	73.1811
41.5	0.99971	56.3425	73.1813
41.6	0.99971	56.343	73.1815
41.7	0.99971	56.3435	73.1817
41.8	0.99971	56.344	73.1819
41.9	0.99972	56.3444	73.1821
42.	0.99972	56.3449	73.1823
42.1	0.99972	56.3454	73.1825
42.2	0.99972	56.3458	73.1826
42.3	0.99972	56.3463	73.1828
42.4	0.99972	56.3467	73.1830
42.5	0.99972	56.3472	73.1832
42.6	0.99972	56.3476	73.1834

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
42.7	0.99973	56.3481	73.1835
42.8	0.99973	56.3485	73.1837
42.9	0.99973	56.3489	73.1839
43.	0.99973	56.3494	73.1841
43.1	0.99973	56.3498	73.1842
43.2	0.99973	56.3502	73.1844
43.3	0.99973	56.3507	73.1846
43.4	0.99973	56.3511	73.1847
43.5	0.99974	56.3515	73.1849
43.6	0.99974	56.3519	73.1851
43.7	0.99974	56.3523	73.1852
43.8	0.99974	56.3528	73.1854
43.9	0.99974	56.3532	73.1856
44.	0.99974	56.3536	73.1857
44.1	0.99974	56.354	73.1859
44.2	0.99974	56.3544	73.1861
44.3	0.99975	56.3548	73.1862
44.4	0.99975	56.3552	73.1864
44.5	0.99975	56.3556	73.1865
44.6	0.99975	56.3559	73.1867
44.7	0.99975	56.3563	73.1868
44.8	0.99975	56.3567	73.1870
44.9	0.99975	56.3571	73.1871
45.	0.99975	56.3575	73.1873
45.1	0.99975	56.3579	73.1874
45.2	0.99976	56.3582	73.1876
45.3	0.99976	56.3586	73.1877
45.4	0.99976	56.359	73.1879
45.5	0.99976	56.3593	73.1880
45.6	0.99976	56.3597	73.1882
45.7	0.99976	56.3601	73.1883
45.8	0.99976	56.3604	73.1885
45.9	0.99976	56.3608	73.1886

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
46.	0.99976	56.3611	73.1888
46.1	0.99976	56.3615	73.1889
46.2	0.99977	56.3618	73.1890
46.3	0.99977	56.3622	73.1892
46.4	0.99977	56.3625	73.1893
46.5	0.99977	56.3629	73.1895
46.6	0.99977	56.3632	73.1896
46.7	0.99977	56.3636	73.1897
46.8	0.99977	56.3639	73.1899
46.9	0.99977	56.3642	73.1900
47.	0.99977	56.3646	73.1901
47.1	0.99977	56.3649	73.1903
47.2	0.99978	56.3652	73.1904
47.3	0.99978	56.3656	73.1905
47.4	0.99978	56.3659	73.1906
47.5	0.99978	56.3662	73.1908
47.6	0.99978	56.3665	73.1909
47.7	0.99978	56.3668	73.1910
47.8	0.99978	56.3672	73.1912
47.9	0.99978	56.3675	73.1913
48.	0.99978	56.3678	73.1914
48.1	0.99978	56.3681	73.1915
48.2	0.99978	56.3684	73.1917
48.3	0.99979	56.3687	73.1918
48.4	0.99979	56.369	73.1919
48.5	0.99979	56.3693	73.1920
48.6	0.99979	56.3696	73.1921
48.7	0.99979	56.3699	73.1923
48.8	0.99979	56.3702	73.1924
48.9	0.99979	56.3705	73.1925
49.	0.99979	56.3708	73.1926
49.1	0.99979	56.3711	73.1927
49.2	0.99979	56.3714	73.1928

Table 8.1: Deflection points for k=1.2 (continue)

M_x	M_y	δ_{max}	θ_{max}
49.3	0.99979	56.3717	73.1930
49.4	0.9998	56.372	73.1931
49.5	0.9998	56.3723	73.1932
49.6	0.9998	56.3725	73.1933
49.7	0.9998	56.3728	73.1934
49.8	0.9998	56.3731	73.1935
49.9	0.9998	56.3734	73.1936
50.	0.9998	56.3737	73.1938
50.1	0.9998	56.3739	73.1939
50.2	0.9998	56.3742	73.1940
50.3	0.9998	56.3745	73.1941
50.4	0.9998	56.3747	73.1942
50.5	0.9998	56.375	73.1943
50.6	0.9998	56.3753	73.1944
50.7	0.99981	56.3755	73.1945
50.8	0.99981	56.3758	73.1946
50.9	0.99981	56.3761	73.1947
51.	0.99981	56.3763	73.1948
51.1	0.99981	56.3766	73.1949
51.2	0.99981	56.3768	73.1950
51.3	0.99981	56.3771	73.1951
51.4	0.99981	56.3774	73.1952
51.5	0.99981	56.3776	73.1953
51.6	0.99981	56.3779	73.1954
51.7	0.99981	56.3781	73.1955
51.8	0.99981	56.3784	73.1956
51.9	0.99981	56.3786	73.1957
52.	0.99982	56.3789	73.1958
52.1	0.99982	56.3791	73.1959
52.2	0.99982	56.3793	73.1960
52.3	0.99982	56.3796	73.1961
52.4	0.99982	56.3798	73.1962
52.5	0.99982	56.3801	73.1963

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
52.6	0.99982	56.3803	73.1964
52.7	0.99982	56.3805	73.1965
52.8	0.99982	56.3808	73.1966
52.9	0.99982	56.381	73.1967
53.	0.99982	56.3812	73.1968
53.1	0.99982	56.3815	73.1969
53.2	0.99982	56.3817	73.1970
53.3	0.99982	56.3819	73.1971
53.4	0.99982	56.3822	73.1971
53.5	0.99983	56.3824	73.1972
53.6	0.99983	56.3826	73.1973
53.7	0.99983	56.3828	73.1974
53.8	0.99983	56.3831	73.1975
53.9	0.99983	56.3833	73.1976
54.	0.99983	56.3835	73.1977
54.1	0.99983	56.3837	73.1978
54.2	0.99983	56.3839	73.1979
54.3	0.99983	56.3841	73.1979
54.4	0.99983	56.3844	73.1980
54.5	0.99983	56.3846	73.1981
54.6	0.99983	56.3848	73.1982
54.7	0.99983	56.385	73.1983
54.8	0.99983	56.3852	73.1984
54.9	0.99983	56.3854	73.1985
55.	0.99983	56.3856	73.1985
55.1	0.99984	56.3858	73.1986
55.2	0.99984	56.386	73.1987
55.3	0.99984	56.3862	73.1988
55.4	0.99984	56.3864	73.1989
55.5	0.99984	56.3866	73.1989
55.6	0.99984	56.3869	73.1990
55.7	0.99984	56.3871	73.1991
55.8	0.99984	56.3872	73.1992

Table 8.1: Deflection points for k=1.2 (continue)

M_x	M_y	δ_{max}	θ_{max}
55.9	0.99984	56.3874	73.1993
56.	0.99984	56.3876	73.1993
56.1	0.99984	56.3878	73.1994
56.2	0.99984	56.388	73.1995
56.3	0.99984	56.3882	73.1996
56.4	0.99984	56.3884	73.1997
56.5	0.99984	56.3886	73.1997
56.6	0.99984	56.3888	73.1998
56.7	0.99984	56.389	73.1999
56.8	0.99985	56.3892	73.2000
56.9	0.99985	56.3894	73.2000
57.	0.99985	56.3896	73.2001
57.1	0.99985	56.3897	73.2002
57.2	0.99985	56.3899	73.2003
57.3	0.99985	56.3901	73.2003
57.4	0.99985	56.3903	73.2004
57.5	0.99985	56.3905	73.2005
57.6	0.99985	56.3907	73.2005
57.7	0.99985	56.3908	73.2006
57.8	0.99985	56.391	73.2007
57.9	0.99985	56.3912	73.2008
58.	0.99985	56.3914	73.2008
58.1	0.99985	56.3915	73.2009
58.2	0.99985	56.3917	73.2010
58.3	0.99985	56.3919	73.2010
58.4	0.99985	56.3921	73.2011
58.5	0.99985	56.3922	73.2012
58.6	0.99985	56.3924	73.2012
58.7	0.99985	56.3926	73.2013
58.8	0.99986	56.3928	73.2014
58.9	0.99986	56.3929	73.2015
59.	0.99986	56.3931	73.2015
59.1	0.99986	56.3933	73.2016

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
59.2	0.99986	56.3934	73.2017
59.3	0.99986	56.3936	73.2017
59.4	0.99986	56.3938	73.2018
59.5	0.99986	56.3939	73.2018
59.6	0.99986	56.3941	73.2019
59.7	0.99986	56.3943	73.2020
59.8	0.99986	56.3944	73.2020
59.9	0.99986	56.3946	73.2021
60.	0.99986	56.3947	73.2022
60.1	0.99986	56.3949	73.2022
60.2	0.99986	56.3951	73.2023
60.3	0.99986	56.3952	73.2024
60.4	0.99986	56.3954	73.2024
60.5	0.99986	56.3955	73.2025
60.6	0.99986	56.3957	73.2026
60.7	0.99986	56.3958	73.2026
60.8	0.99986	56.396	73.2027
60.9	0.99987	56.3961	73.2027
61.	0.99987	56.3963	73.2028
61.1	0.99987	56.3964	73.2029
61.2	0.99987	56.3966	73.2029
61.3	0.99987	56.3967	73.2030
61.4	0.99987	56.3969	73.2030
61.5	0.99987	56.397	73.2031
61.6	0.99987	56.3972	73.2032
61.7	0.99987	56.3973	73.2032
61.8	0.99987	56.3975	73.2033
61.9	0.99987	56.3976	73.2033
62.	0.99987	56.3978	73.2034
62.1	0.99987	56.3979	73.2034
62.2	0.99987	56.3981	73.2035
62.3	0.99987	56.3982	73.2036
62.4	0.99987	56.3984	73.2036

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
62.5	0.99987	56.3985	73.2037
62.6	0.99987	56.3986	73.2037
62.7	0.99987	56.3988	73.2038
62.8	0.99987	56.3989	73.2038
62.9	0.99987	56.3991	73.2039
63.	0.99987	56.3992	73.2040
63.1	0.99987	56.3993	73.2040
63.2	0.99987	56.3995	73.2041
63.3	0.99988	56.3996	73.2041
63.4	0.99988	56.3997	73.2042
63.5	0.99988	56.3999	73.2042
63.6	0.99988	56.4	73.2043
63.7	0.99988	56.4001	73.2043
63.8	0.99988	56.4003	73.2044
63.9	0.99988	56.4004	73.2044
64.	0.99988	56.4005	73.2045
64.1	0.99988	56.4007	73.2045
64.2	0.99988	56.4008	73.2046
64.3	0.99988	56.4009	73.2046
64.4	0.99988	56.4011	73.2047
64.5	0.99988	56.4012	73.2048
64.6	0.99988	56.4013	73.2048
64.7	0.99988	56.4014	73.2049
64.8	0.99988	56.4016	73.2049
64.9	0.99988	56.4017	73.2050
65.	0.99988	56.4018	73.2050
65.1	0.99988	56.402	73.2051
65.2	0.99988	56.4021	73.2051
65.3	0.99988	56.4022	73.2052
65.4	0.99988	56.4023	73.2052
65.5	0.99988	56.4024	73.2053
65.6	0.99988	56.4026	73.2053
65.7	0.99988	56.4027	73.2054

Table 8.1: Deflection points for k=1.2 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
65.8	0.99988	56.4028	73.2054
65.9	0.99988	56.4029	73.2054
66.	0.99989	56.4031	73.2055
66.1	0.99989	56.4032	73.2055
66.2	0.99989	56.4033	73.2056
66.3	0.99989	56.4034	73.2056
66.4	0.99989	56.4035	73.2057
66.5	0.99989	56.4036	73.2057
66.6	0.99989	56.4038	73.2058
66.7	0.99989	56.4039	73.2058
66.8	0.99989	56.404	73.2059
66.9	0.99989	56.4041	73.2059
67.	0.99989	56.4042	73.2060
67.1	0.99989	56.4043	73.2060
67.2	0.99989	56.4045	73.2061
67.3	0.99989	56.4046	73.2061
67.4	0.99989	56.4047	73.2061
67.5	0.99989	56.4048	73.2062
67.6	0.99989	56.4049	73.2062
67.7	0.99989	56.405	73.2063
67.8	0.99989	56.4051	73.2063
67.9	0.99989	56.4052	73.2064
68.	0.99989	56.4053	73.2064
68.1	0.99989	56.4055	73.2065
68.2	0.99989	56.4056	73.2065
68.3	0.99989	56.4057	73.2065
68.4	0.99989	56.4058	73.2066
68.5	0.99989	56.4059	73.2066
68.6	0.99989	56.406	73.2067
68.7	0.99989	56.4061	73.2067
68.8	0.99989	56.4062	73.2068
68.9	0.99989	56.4063	73.2068
69.	0.9999	56.4064	73.2068

Table 8.1: Deflection points for k=1.2 (continue)

M_x	M_y	δ_{max}	θ_{max}
69.1	0.9999	56.4065	73.2069
69.2	0.9999	56.4066	73.2069
69.3	0.9999	56.4067	73.2070
69.4	0.9999	56.4068	73.2070
69.5	0.9999	56.4069	73.2071
69.6	0.9999	56.407	73.2071
69.7	0.9999	56.4071	73.2071
69.8	0.9999	56.4072	73.2072
69.9	0.9999	56.4074	73.2072
70.	0.9999	56.4075	73.2073

8.1.2 Deflection Point for k=1.3

Table 8.2: Deflection points for k=1.3

M_x	M_y	δ_{max}	θ_{max}
1.	1.0	?.	?.
1.01	0.99671	0.05383	85.3591
1.02	0.99351	0.1511	83.4889
1.03	0.9904	0.27548	82.0886
1.04	0.98737	0.4209	80.9365
1.05	0.98443	0.58374	79.9459
1.06	0.98157	0.76147	79.0720
1.07	0.9788	0.95219	78.2878
1.08	0.97611	1.1544	77.5756
1.09	0.9735	1.3669	76.9229
1.1	0.97096	1.5885	76.3207
1.11	0.96851	1.8184	75.7620
1.12	0.96613	2.0559	75.2413
1.13	0.96383	2.3001	74.7542
1.14	0.9616	2.5504	74.2971
1.15	0.95945	2.8064	73.8670
1.16	0.95736	3.0674	73.4615

Table 8.2: Deflection points for k=1.3 (continue)

M_x	M_y	δ_{max}	θ_{max}
1.17	0.95535	3.333	73.0783
1.18	0.95341	3.6028	72.7157
1.19	0.95153	3.8764	72.3719
1.2	0.94972	4.1533	72.0456
1.21	0.94797	4.4333	71.7355
1.22	0.94629	4.716	71.4405
1.23	0.94467	5.0011	71.1596
1.24	0.94311	5.2884	70.8920
1.25	0.94161	5.5776	70.6367
1.26	0.94017	5.8684	70.3930
1.27	0.93879	6.1606	70.1604
1.28	0.93746	6.454	69.9381
1.29	0.93619	6.7483	69.7256
1.3	0.93496	7.0435	69.5224
1.31	0.93379	7.3392	69.3280
1.32	0.93268	7.6354	69.1419
1.33	0.93161	7.9319	68.9638
1.34	0.93058	8.2284	68.7933
1.35	0.92961	8.525	68.6299
1.36	0.92868	8.8214	68.4735
1.37	0.9278	9.1175	68.3235
1.38	0.92695	9.4131	68.1799
1.39	0.92615	9.7083	68.0422
1.4	0.9254	10.0028	67.9103
1.41	0.92468	10.2966	67.7838
1.42	0.924	10.5895	67.6626
1.43	0.92336	10.8815	67.5464
1.44	0.92275	11.1725	67.4350
1.45	0.92218	11.4625	67.3283
1.46	0.92165	11.7512	67.2260
1.47	0.92114	12.0388	67.1280
1.48	0.92067	12.325	67.0341
1.49	0.92024	12.6099	66.9441

Table 8.2: Deflection points for k=1.3 (continue)

M_x	M_y	δ_{max}	θ_{max}
1.5	0.91983	12.8934	66.8579
1.51	0.91945	13.1754	66.7754
1.52	0.9191	13.4558	66.6964
1.53	0.91878	13.7347	66.6207
1.54	0.91849	14.012	66.5483
1.55	0.91822	14.2877	66.4791
1.56	0.91798	14.5616	66.4128
1.57	0.91776	14.8339	66.3495
1.58	0.91757	15.1043	66.2889
1.59	0.9174	15.373	66.2311
1.6	0.91725	15.6399	66.1759
1.61	0.91712	15.905	66.1231
1.62	0.91701	16.1681	66.0728
1.63	0.91693	16.4294	66.0249
1.64	0.91686	16.6889	65.9792
1.65	0.91681	16.9464	65.9357
1.66	0.91678	17.2019	65.8943
1.67	0.91677	17.4556	65.8549
1.68	0.91677	17.7073	65.8175
1.69	0.91679	17.957	65.7819
1.7	0.91683	18.2048	65.7482
1.71	0.91688	18.4505	65.7163
1.72	0.91694	18.6944	65.6861
1.73	0.91702	18.9362	65.6575
1.74	0.91711	19.176	65.6305
1.75	0.91721	19.4139	65.6050
1.76	0.91733	19.6498	65.5811
1.77	0.91746	19.8837	65.5585
1.78	0.9176	20.1156	65.5374
1.79	0.91775	20.3455	65.5176
1.8	0.91791	20.5735	65.4991
1.81	0.91808	20.7995	65.4818
1.82	0.91826	21.0235	65.4658

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
1.83	0.91845	21.2455	65.4509
1.84	0.91865	21.4657	65.4371
1.85	0.91886	21.6838	65.4245
1.86	0.91908	21.9	65.4129
1.87	0.9193	22.1143	65.4023
1.88	0.91953	22.3267	65.3927
1.89	0.91977	22.5372	65.3840
1.9	0.92001	22.7457	65.3763
1.91	0.92026	22.9524	65.3695
1.92	0.92052	23.1572	65.3635
1.93	0.92078	23.3601	65.3584
1.94	0.92105	23.5612	65.3540
1.95	0.92132	23.7604	65.3504
1.96	0.9216	23.9578	65.3476
1.97	0.92188	24.1534	65.3455
1.98	0.92217	24.3472	65.3441
1.99	0.92246	24.5392	65.3434
2.	0.92276	24.7294	65.3433
2.02	0.92336	25.1045	65.3450
2.04	0.92398	25.4726	65.3491
2.06	0.92461	25.8339	65.3553
2.08	0.92524	26.1885	65.3636
2.1	0.92589	26.5364	65.3738
2.12	0.92654	26.8779	65.3857
2.14	0.92721	27.2129	65.3993
2.16	0.92787	27.5417	65.4144
2.18	0.92854	27.8644	65.4308
2.2	0.92922	28.181	65.4486
2.22	0.92989	28.4917	65.4677
2.24	0.93057	28.7966	65.4878
2.26	0.93125	29.0958	65.5089
2.28	0.93192	29.3894	65.5310
2.3	0.9326	29.6775	65.5540

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
2.32	0.93328	29.9603	65.5778
2.34	0.93395	30.2379	65.6023
2.36	0.93463	30.5103	65.6275
2.38	0.93529	30.7777	65.6533
2.4	0.93596	31.0401	65.6797
2.42	0.93662	31.2977	65.7066
2.44	0.93728	31.5506	65.7339
2.46	0.93794	31.7989	65.7617
2.48	0.93859	32.0427	65.7898
2.5	0.93923	32.282	65.8183
2.52	0.93988	32.517	65.8470
2.54	0.94051	32.7477	65.8760
2.56	0.94114	32.9743	65.9052
2.58	0.94177	33.1968	65.9347
2.6	0.94238	33.4154	65.9642
2.62	0.943	33.63	65.9939
2.64	0.9436	33.8409	66.0238
2.66	0.94421	34.048	66.0537
2.68	0.9448	34.2514	66.0836
2.7	0.94539	34.4513	66.1136
2.72	0.94597	34.6477	66.1436
2.74	0.94655	34.8407	66.1736
2.76	0.94712	35.0303	66.2036
2.78	0.94768	35.2166	66.2336
2.8	0.94824	35.3997	66.2635
2.82	0.94879	35.5797	66.2934
2.84	0.94933	35.7566	66.3231
2.86	0.94987	35.9305	66.3528
2.88	0.9504	36.1014	66.3824
2.9	0.95093	36.2695	66.4119
2.92	0.95144	36.4347	66.4412
2.94	0.95196	36.5972	66.4705
2.96	0.95246	36.7569	66.4996

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
2.98	0.95296	36.914	66.5285
3.	0.95346	37.0685	66.5573
3.02	0.95394	37.2205	66.5859
3.04	0.95442	37.37	66.6144
3.06	0.9549	37.517	66.6427
3.08	0.95537	37.6616	66.6708
3.1	0.95583	37.8039	66.6987
3.12	0.95629	37.9439	66.7264
3.14	0.95674	38.0817	66.7540
3.16	0.95718	38.2172	66.7813
3.18	0.95762	38.3506	66.8085
3.2	0.95806	38.4819	66.8354
3.22	0.95848	38.6111	66.8622
3.24	0.95891	38.7383	66.8887
3.26	0.95932	38.8635	66.9151
3.28	0.95974	38.9867	66.9412
3.3	0.96014	39.108	66.9671
3.32	0.96054	39.2275	66.9928
3.34	0.96094	39.3451	67.0183
3.36	0.96133	39.4609	67.0436
3.38	0.96171	39.575	67.0687
3.4	0.96209	39.6873	67.0935
3.42	0.96247	39.7979	67.1182
3.44	0.96284	39.9068	67.1426
3.46	0.96321	40.0142	67.1668
3.48	0.96357	40.1199	67.1908
3.5	0.96392	40.224	67.2145
3.52	0.96427	40.3266	67.2381
3.54	0.96462	40.4277	67.2614
3.56	0.96496	40.5273	67.2846
3.58	0.9653	40.6254	67.3075
3.6	0.96563	40.7222	67.3302
3.62	0.96596	40.8175	67.3527

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
3.64	0.96629	40.9114	67.3750
3.66	0.96661	41.004	67.3970
3.68	0.96693	41.0953	67.4189
3.7	0.96724	41.1852	67.4406
3.72	0.96755	41.2739	67.4620
3.74	0.96785	41.3614	67.4833
3.76	0.96815	41.4476	67.5043
3.78	0.96845	41.5325	67.5251
3.8	0.96874	41.6163	67.5458
3.82	0.96903	41.699	67.5662
3.84	0.96931	41.7805	67.5864
3.86	0.9696	41.8608	67.6065
3.88	0.96987	41.9401	67.6263
3.9	0.97015	42.0183	67.6460
3.92	0.97042	42.0954	67.6654
3.94	0.97069	42.1715	67.6847
3.96	0.97095	42.2465	67.7038
3.98	0.97121	42.3205	67.7227
4.	0.97147	42.3936	67.7414
4.02	0.97173	42.4656	67.7599
4.04	0.97198	42.5367	67.7782
4.06	0.97223	42.6069	67.7964
4.08	0.97247	42.6761	67.8144
4.1	0.97271	42.7445	67.8322
4.12	0.97295	42.8119	67.8498
4.14	0.97319	42.8784	67.8673
4.16	0.97342	42.9441	67.8845
4.18	0.97365	43.009	67.9016
4.2	0.97388	43.073	67.9186
4.22	0.9741	43.1361	67.9354
4.24	0.97433	43.1985	67.9520
4.26	0.97454	43.2601	67.9684
4.28	0.97476	43.3209	67.9847

Table 8.2: Deflection points for k=1.3 (continue)

M_x	M_y	δ_{max}	θ_{max}
4.3	0.97498	43.3809	68.0008
4.32	0.97519	43.4402	68.0168
4.34	0.9754	43.4987	68.0326
4.36	0.9756	43.5565	68.0482
4.38	0.97581	43.6136	68.0637
4.4	0.97601	43.6699	68.0790
4.42	0.97621	43.7256	68.0942
4.44	0.9764	43.7806	68.1093
4.46	0.9766	43.8349	68.1241
4.48	0.97679	43.8885	68.1389
4.5	0.97698	43.9415	68.1535
4.52	0.97717	43.9939	68.1679
4.54	0.97735	44.0456	68.1823
4.56	0.97754	44.0967	68.1964
4.58	0.97772	44.1472	68.2105
4.6	0.9779	44.197	68.2244
4.62	0.97807	44.2463	68.2381
4.64	0.97825	44.295	68.2517
4.66	0.97842	44.3431	68.2652
4.68	0.97859	44.3907	68.2786
4.7	0.97876	44.4377	68.2918
4.72	0.97893	44.4841	68.3049
4.74	0.9791	44.53	68.3179
4.76	0.97926	44.5754	68.3308
4.78	0.97942	44.6203	68.3435
4.8	0.97958	44.6646	68.3561
4.82	0.97974	44.7084	68.3686
4.84	0.97989	44.7517	68.3810
4.86	0.98005	44.7946	68.3932
4.88	0.9802	44.8369	68.4053
4.9	0.98035	44.8788	68.4174
4.92	0.9805	44.9202	68.4293
4.94	0.98065	44.9611	68.4410

Table 8.2: Deflection points for k=1.3 (continue)

M_x	M_y	δ_{max}	θ_{max}
4.96	0.9808	45.0016	68.4527
4.98	0.98094	45.0416	68.4643
5.	0.98108	45.0811	68.4757
5.04	0.98136	45.159	68.4983
5.08	0.98164	45.2351	68.5205
5.12	0.98191	45.3095	68.5422
5.16	0.98217	45.3824	68.5636
5.2	0.98243	45.4537	68.5845
5.24	0.98268	45.5235	68.6051
5.28	0.98293	45.5918	68.6252
5.32	0.98317	45.6586	68.6450
5.36	0.98341	45.7241	68.6645
5.4	0.98364	45.7882	68.6836
5.44	0.98387	45.851	68.7023
5.48	0.98409	45.9124	68.7207
5.52	0.98431	45.9727	68.7388
5.56	0.98453	46.0317	68.7565
5.6	0.98474	46.0895	68.7740
5.64	0.98494	46.1462	68.7911
5.68	0.98514	46.2018	68.8079
5.72	0.98534	46.2562	68.8244
5.76	0.98554	46.3096	68.8407
5.8	0.98573	46.3619	68.8566
5.84	0.98591	46.4133	68.8723
5.88	0.9861	46.4636	68.8877
5.92	0.98628	46.513	68.9028
5.96	0.98645	46.5614	68.9177
6.	0.98662	46.609	68.9323
6.04	0.98679	46.6556	68.9467
6.08	0.98696	46.7013	68.9608
6.12	0.98712	46.7463	68.9747
6.16	0.98728	46.7903	68.9884
6.2	0.98744	46.8336	69.0018

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
6.24	0.9876	46.8761	69.0150
6.28	0.98775	46.9178	69.0280
6.32	0.9879	46.9588	69.0408
6.36	0.98804	46.999	69.0533
6.4	0.98819	47.0385	69.0657
6.44	0.98833	47.0773	69.0778
6.48	0.98847	47.1154	69.0898
6.52	0.9886	47.1529	69.1016
6.56	0.98874	47.1897	69.1131
6.6	0.98887	47.2258	69.1245
6.64	0.989	47.2614	69.1357
6.68	0.98913	47.2963	69.1468
6.72	0.98925	47.3306	69.1576
6.76	0.98937	47.3644	69.1683
6.8	0.9895	47.3976	69.1788
6.84	0.98961	47.4302	69.1892
6.88	0.98973	47.4623	69.1994
6.92	0.98985	47.4938	69.2094
6.96	0.98996	47.5248	69.2193
7.	0.99007	47.5553	69.2290
7.04	0.99018	47.5854	69.2386
7.08	0.99029	47.6149	69.2480
7.12	0.99039	47.6439	69.2573
7.16	0.9905	47.6725	69.2665
7.2	0.9906	47.7007	69.2755
7.24	0.9907	47.7283	69.2844
7.28	0.9908	47.7556	69.2931
7.32	0.9909	47.7824	69.3018
7.36	0.99099	47.8088	69.3102
7.4	0.99109	47.8348	69.3186
7.44	0.99118	47.8603	69.3269
7.48	0.99127	47.8855	69.3350
7.52	0.99136	47.9103	69.3430

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
7.56	0.99145	47.9347	69.3509
7.6	0.99154	47.9588	69.3587
7.64	0.99163	47.9824	69.3663
7.68	0.99171	48.0058	69.3739
7.72	0.99179	48.0287	69.3813
7.76	0.99188	48.0514	69.3887
7.8	0.99196	48.0737	69.3959
7.84	0.99204	48.0956	69.4031
7.88	0.99212	48.1173	69.4101
7.92	0.99219	48.1386	69.4171
7.96	0.99227	48.1596	69.4239
8.	0.99235	48.1803	69.4307
8.04	0.99242	48.2007	69.4373
8.08	0.99249	48.2208	69.4439
8.12	0.99257	48.2407	69.4504
8.16	0.99264	48.2602	69.4568
8.2	0.99271	48.2795	69.4631
8.24	0.99278	48.2985	69.4693
8.28	0.99285	48.3172	69.4754
8.32	0.99291	48.3357	69.4815
8.36	0.99298	48.3539	69.4875
8.4	0.99304	48.3718	69.4934
8.44	0.99311	48.3895	69.4992
8.48	0.99317	48.407	69.5049
8.52	0.99324	48.4242	69.5106
8.56	0.9933	48.4412	69.5162
8.6	0.99336	48.458	69.5217
8.64	0.99342	48.4745	69.5272
8.68	0.99348	48.4909	69.5325
8.72	0.99354	48.507	69.5378
8.76	0.99359	48.5228	69.5431
8.8	0.99365	48.5385	69.5483
8.84	0.99371	48.554	69.5534

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
8.88	0.99376	48.5692	69.5584
8.92	0.99382	48.5843	69.5634
8.96	0.99387	48.5992	69.5683
9.	0.99393	48.6138	69.5732
9.04	0.99398	48.6283	69.5780
9.08	0.99403	48.6426	69.5827
9.12	0.99408	48.6567	69.5874
9.16	0.99413	48.6707	69.5920
9.2	0.99418	48.6844	69.5966
9.24	0.99423	48.698	69.6011
9.28	0.99428	48.7114	69.6056
9.32	0.99433	48.7247	69.6100
9.36	0.99438	48.7377	69.6143
9.4	0.99442	48.7507	69.6186
9.44	0.99447	48.7634	69.6228
9.48	0.99452	48.776	69.6270
9.52	0.99456	48.7884	69.6312
9.56	0.99461	48.8007	69.6353
9.6	0.99465	48.8129	69.6393
9.64	0.99469	48.8249	69.6433
9.68	0.99474	48.8367	69.6473
9.72	0.99478	48.8484	69.6512
9.76	0.99482	48.86	69.6551
9.8	0.99486	48.8714	69.6589
9.84	0.99491	48.8827	69.6626
9.88	0.99495	48.8938	69.6664
9.92	0.99499	48.9049	69.6701
9.96	0.99503	48.9158	69.6737
10.	0.99506	48.9265	69.6773
10.1	0.99516	48.9529	69.6861
10.2	0.99525	48.9785	69.6947
10.3	0.99534	49.0034	69.7031
10.4	0.99543	49.0276	69.7112

Table 8.2: Deflection points for k=1.3 (continue)

M_x	M_y	δ_{max}	θ_{max}
10.5	0.99552	49.0511	69.7191
10.6	0.9956	49.0739	69.7268
10.7	0.99568	49.0962	69.7343
10.8	0.99576	49.1178	69.7415
10.9	0.99584	49.1388	69.7486
11.	0.99591	49.1593	69.7555
11.1	0.99598	49.1792	69.7623
11.2	0.99606	49.1987	69.7688
11.3	0.99612	49.2176	69.7752
11.4	0.99619	49.236	69.7815
11.5	0.99626	49.2539	69.7875
11.6	0.99632	49.2714	69.7935
11.7	0.99638	49.2885	69.7992
11.8	0.99644	49.3051	69.8049
11.9	0.9965	49.3213	69.8104
12.	0.99656	49.3372	69.8157
12.1	0.99661	49.3526	69.8210
12.2	0.99667	49.3677	69.8261
12.3	0.99672	49.3824	69.8311
12.4	0.99678	49.3967	69.8360
12.5	0.99683	49.4107	69.8407
12.6	0.99688	49.4244	69.8454
12.7	0.99692	49.4378	69.8499
12.8	0.99697	49.4508	69.8544
12.9	0.99702	49.4636	69.8587
13.	0.99706	49.4761	69.8630
13.1	0.99711	49.4883	69.8672
13.2	0.99715	49.5002	69.8712
13.3	0.99719	49.5118	69.8752
13.4	0.99724	49.5232	69.8791
13.5	0.99728	49.5344	69.8829
13.6	0.99732	49.5453	69.8866
13.7	0.99735	49.556	69.8903

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
13.8	0.99739	49.5664	69.8938
13.9	0.99743	49.5766	69.8973
14.	0.99747	49.5866	69.9008
14.1	0.9975	49.5964	69.9041
14.2	0.99754	49.606	69.9074
14.3	0.99757	49.6154	69.9106
14.4	0.9976	49.6246	69.9138
14.5	0.99764	49.6336	69.9168
14.6	0.99767	49.6424	69.9199
14.7	0.9977	49.6511	69.9228
14.8	0.99773	49.6595	69.9257
14.9	0.99776	49.6678	69.9286
15.	0.99779	49.676	69.9314
15.1	0.99782	49.684	69.9341
15.2	0.99785	49.6918	69.9368
15.3	0.99788	49.6995	69.9394
15.4	0.9979	49.707	69.9420
15.5	0.99793	49.7144	69.9446
15.6	0.99796	49.7216	69.9471
15.7	0.99798	49.7287	69.9495
15.8	0.99801	49.7357	69.9519
15.9	0.99803	49.7426	69.9543
16.	0.99806	49.7493	69.9566
16.1	0.99808	49.7559	69.9588
16.2	0.9981	49.7623	69.9611
16.3	0.99813	49.7687	69.9633
16.4	0.99815	49.7749	69.9654
16.5	0.99817	49.7811	69.9675
16.6	0.99819	49.7871	69.9696
16.7	0.99822	49.793	69.9716
16.8	0.99824	49.7988	69.9736
16.9	0.99826	49.8045	69.9756
17.	0.99828	49.8101	69.9775

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
17.1	0.9983	49.8156	69.9794
17.2	0.99832	49.821	69.9813
17.3	0.99834	49.8263	69.9831
17.4	0.99836	49.8316	69.9849
17.5	0.99837	49.8367	69.9867
17.6	0.99839	49.8418	69.9884
17.7	0.99841	49.8467	69.9901
17.8	0.99843	49.8516	69.9918
17.9	0.99845	49.8564	69.9935
18.	0.99846	49.8611	69.9951
18.1	0.99848	49.8658	69.9967
18.2	0.9985	49.8704	69.9983
18.3	0.99851	49.8749	69.9999
18.4	0.99853	49.8793	70.0014
18.5	0.99854	49.8836	70.0029
18.6	0.99856	49.8879	70.0044
18.7	0.99858	49.8921	70.0058
18.8	0.99859	49.8963	70.0073
18.9	0.99861	49.9004	70.0087
19.	0.99862	49.9044	70.0101
19.1	0.99863	49.9083	70.0114
19.2	0.99865	49.9122	70.0128
19.3	0.99866	49.9161	70.0141
19.4	0.99868	49.9198	70.0154
19.5	0.99869	49.9236	70.0167
19.6	0.9987	49.9272	70.0180
19.7	0.99872	49.9308	70.0192
19.8	0.99873	49.9344	70.0204
19.9	0.99874	49.9379	70.0217
20.	0.99875	49.9413	70.0229
20.1	0.99877	49.9447	70.0240
20.2	0.99878	49.9481	70.0252
20.3	0.99879	49.9514	70.0263

Table 8.2: Deflection points for k=1.3 (continue)

M_x	M_y	δ_{max}	θ_{max}
20.4	0.9988	49.9546	70.0275
20.5	0.99881	49.9578	70.0286
20.6	0.99883	49.961	70.0297
20.7	0.99884	49.9641	70.0307
20.8	0.99885	49.9672	70.0318
20.9	0.99886	49.9702	70.0328
21.	0.99887	49.9732	70.0339
21.1	0.99888	49.9761	70.0349
21.2	0.99889	49.979	70.0359
21.3	0.9989	49.9818	70.0369
21.4	0.99891	49.9847	70.0379
21.5	0.99892	49.9874	70.0388
21.6	0.99893	49.9902	70.0398
21.7	0.99894	49.9929	70.0407
21.8	0.99895	49.9955	70.0416
21.9	0.99896	49.9982	70.0425
22.	0.99897	50.0008	70.0434
22.1	0.99898	50.0033	70.0443
22.2	0.99899	50.0058	70.0452
22.3	0.999	50.0083	70.0461
22.4	0.99901	50.0108	70.0469
22.5	0.99901	50.0132	70.0478
22.6	0.99902	50.0156	70.0486
22.7	0.99903	50.018	70.0494
22.8	0.99904	50.0203	70.0502
22.9	0.99905	50.0226	70.0510
23.	0.99906	50.0249	70.0518
23.1	0.99907	50.0271	70.0526
23.2	0.99907	50.0293	70.0533
23.3	0.99908	50.0315	70.0541
23.4	0.99909	50.0336	70.0549
23.5	0.9991	50.0358	70.0556
23.6	0.9991	50.0379	70.0563

Table 8.2: Deflection points for k=1.3 (continue)

M_x	M_y	δ_{max}	θ_{max}
23.7	0.99911	50.0399	70.0570
23.8	0.99912	50.042	70.0578
23.9	0.99913	50.044	70.0585
24.	0.99913	50.046	70.0592
24.1	0.99914	50.048	70.0598
24.2	0.99915	50.0499	70.0605
24.3	0.99916	50.0519	70.0612
24.4	0.99916	50.0538	70.0618
24.5	0.99917	50.0556	70.0625
24.6	0.99918	50.0575	70.0631
24.7	0.99918	50.0593	70.0638
24.8	0.99919	50.0611	70.0644
24.9	0.9992	50.0629	70.0650
25.	0.9992	50.0647	70.0656
25.1	0.99921	50.0664	70.0662
25.2	0.99921	50.0682	70.0668
25.3	0.99922	50.0699	70.0674
25.4	0.99923	50.0716	70.0680
25.5	0.99923	50.0732	70.0686
25.6	0.99924	50.0749	70.0692
25.7	0.99924	50.0765	70.0697
25.8	0.99925	50.0781	70.0703
25.9	0.99926	50.0797	70.0709
26.	0.99926	50.0813	70.0714
26.1	0.99927	50.0828	70.0719
26.2	0.99927	50.0844	70.0725
26.3	0.99928	50.0859	70.0730
26.4	0.99928	50.0874	70.0735
26.5	0.99929	50.0889	70.0740
26.6	0.99929	50.0903	70.0746
26.7	0.9993	50.0918	70.0751
26.8	0.99931	50.0932	70.0756
26.9	0.99931	50.0946	70.0761

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
27.	0.99932	50.096	70.0765
27.1	0.99932	50.0974	70.0770
27.2	0.99933	50.0988	70.0775
27.3	0.99933	50.1002	70.0780
27.4	0.99934	50.1015	70.0784
27.5	0.99934	50.1028	70.0789
27.6	0.99934	50.1041	70.0794
27.7	0.99935	50.1054	70.0798
27.8	0.99935	50.1067	70.0803
27.9	0.99936	50.108	70.0807
28.	0.99936	50.1093	70.0811
28.1	0.99937	50.1105	70.0816
28.2	0.99937	50.1117	70.0820
28.3	0.99938	50.113	70.0824
28.4	0.99938	50.1142	70.0828
28.5	0.99939	50.1154	70.0833
28.6	0.99939	50.1165	70.0837
28.7	0.99939	50.1177	70.0841
28.8	0.9994	50.1189	70.0845
28.9	0.9994	50.12	70.0849
29.	0.99941	50.1211	70.0853
29.1	0.99941	50.1223	70.0857
29.2	0.99941	50.1234	70.0861
29.3	0.99942	50.1245	70.0864
29.4	0.99942	50.1256	70.0868
29.5	0.99943	50.1266	70.0872
29.6	0.99943	50.1277	70.0876
29.7	0.99943	50.1287	70.0879
29.8	0.99944	50.1298	70.0883
29.9	0.99944	50.1308	70.0887
30.	0.99945	50.1319	70.0890
30.1	0.99945	50.1329	70.0894
30.2	0.99945	50.1339	70.0897

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
30.3	0.99946	50.1349	70.0901
30.4	0.99946	50.1358	70.0904
30.5	0.99946	50.1368	70.0907
30.6	0.99947	50.1378	70.0911
30.7	0.99947	50.1387	70.0914
30.8	0.99947	50.1397	70.0917
30.9	0.99948	50.1406	70.0921
31.	0.99948	50.1415	70.0924
31.1	0.99948	50.1425	70.0927
31.2	0.99949	50.1434	70.0930
31.3	0.99949	50.1443	70.0933
31.4	0.99949	50.1452	70.0936
31.5	0.9995	50.1461	70.0940
31.6	0.9995	50.1469	70.0943
31.7	0.9995	50.1478	70.0946
31.8	0.99951	50.1487	70.0949
31.9	0.99951	50.1495	70.0952
32.	0.99951	50.1504	70.0955
32.1	0.99952	50.1512	70.0957
32.2	0.99952	50.152	70.0960
32.3	0.99952	50.1528	70.0963
32.4	0.99952	50.1536	70.0966
32.5	0.99953	50.1545	70.0969
32.6	0.99953	50.1552	70.0972
32.7	0.99953	50.156	70.0974
32.8	0.99954	50.1568	70.0977
32.9	0.99954	50.1576	70.0980
33.	0.99954	50.1584	70.0982
33.1	0.99954	50.1591	70.0985
33.2	0.99955	50.1599	70.0988
33.3	0.99955	50.1606	70.0990
33.4	0.99955	50.1614	70.0993
33.5	0.99955	50.1621	70.0996

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
33.6	0.99956	50.1628	70.0998
33.7	0.99956	50.1636	70.1001
33.8	0.99956	50.1643	70.1003
33.9	0.99957	50.165	70.1006
34.	0.99957	50.1657	70.1008
34.1	0.99957	50.1664	70.1010
34.2	0.99957	50.1671	70.1013
34.3	0.99958	50.1678	70.1015
34.4	0.99958	50.1684	70.1018
34.5	0.99958	50.1691	70.1020
34.6	0.99958	50.1698	70.1022
34.7	0.99959	50.1704	70.1025
34.8	0.99959	50.1711	70.1027
34.9	0.99959	50.1717	70.1029
35.	0.99959	50.1724	70.1031
35.1	0.99959	50.173	70.1034
35.2	0.9996	50.1737	70.1036
35.3	0.9996	50.1743	70.1038
35.4	0.9996	50.1749	70.1040
35.5	0.9996	50.1755	70.1042
35.6	0.99961	50.1761	70.1044
35.7	0.99961	50.1768	70.1047
35.8	0.99961	50.1774	70.1049
35.9	0.99961	50.178	70.1051
36.	0.99961	50.1785	70.1053
36.1	0.99962	50.1791	70.1055
36.2	0.99962	50.1797	70.1057
36.3	0.99962	50.1803	70.1059
36.4	0.99962	50.1809	70.1061
36.5	0.99963	50.1814	70.1063
36.6	0.99963	50.182	70.1065
36.7	0.99963	50.1826	70.1067
36.8	0.99963	50.1831	70.1069

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
36.9	0.99963	50.1837	70.1071
37.	0.99964	50.1842	70.1073
37.1	0.99964	50.1848	70.1074
37.2	0.99964	50.1853	70.1076
37.3	0.99964	50.1858	70.1078
37.4	0.99964	50.1863	70.1080
37.5	0.99964	50.1869	70.1082
37.6	0.99965	50.1874	70.1084
37.7	0.99965	50.1879	70.1085
37.8	0.99965	50.1884	70.1087
37.9	0.99965	50.1889	70.1089
38.	0.99965	50.1894	70.1091
38.1	0.99966	50.1899	70.1093
38.2	0.99966	50.1904	70.1094
38.3	0.99966	50.1909	70.1096
38.4	0.99966	50.1914	70.1098
38.5	0.99966	50.1919	70.1099
38.6	0.99966	50.1924	70.1101
38.7	0.99967	50.1928	70.1103
38.8	0.99967	50.1933	70.1104
38.9	0.99967	50.1938	70.1106
39.	0.99967	50.1943	70.1108
39.1	0.99967	50.1947	70.1109
39.2	0.99967	50.1952	70.1111
39.3	0.99968	50.1956	70.1112
39.4	0.99968	50.1961	70.1114
39.5	0.99968	50.1965	70.1116
39.6	0.99968	50.197	70.1117
39.7	0.99968	50.1974	70.1119
39.8	0.99968	50.1979	70.1120
39.9	0.99969	50.1983	70.1122
40.	0.99969	50.1987	70.1123
40.1	0.99969	50.1992	70.1125

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
40.2	0.99969	50.1996	70.1126
40.3	0.99969	50.2	70.1128
40.4	0.99969	50.2004	70.1129
40.5	0.9997	50.2008	70.1131
40.6	0.9997	50.2013	70.1132
40.7	0.9997	50.2017	70.1133
40.8	0.9997	50.2021	70.1135
40.9	0.9997	50.2025	70.1136
41.	0.9997	50.2029	70.1138
41.1	0.9997	50.2033	70.1139
41.2	0.99971	50.2037	70.1140
41.3	0.99971	50.2041	70.1142
41.4	0.99971	50.2044	70.1143
41.5	0.99971	50.2048	70.1145
41.6	0.99971	50.2052	70.1146
41.7	0.99971	50.2056	70.1147
41.8	0.99971	50.206	70.1149
41.9	0.99972	50.2064	70.1150
42.	0.99972	50.2067	70.1151
42.1	0.99972	50.2071	70.1152
42.2	0.99972	50.2075	70.1154
42.3	0.99972	50.2078	70.1155
42.4	0.99972	50.2082	70.1156
42.5	0.99972	50.2086	70.1158
42.6	0.99972	50.2089	70.1159
42.7	0.99973	50.2093	70.1160
42.8	0.99973	50.2096	70.1161
42.9	0.99973	50.21	70.1162
43.	0.99973	50.2103	70.1164
43.1	0.99973	50.2107	70.1165
43.2	0.99973	50.211	70.1166
43.3	0.99973	50.2113	70.1167
43.4	0.99973	50.2117	70.1168

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
43.5	0.99974	50.212	70.1170
43.6	0.99974	50.2124	70.1171
43.7	0.99974	50.2127	70.1172
43.8	0.99974	50.213	70.1173
43.9	0.99974	50.2133	70.1174
44.	0.99974	50.2137	70.1175
44.1	0.99974	50.214	70.1177
44.2	0.99974	50.2143	70.1178
44.3	0.99975	50.2146	70.1179
44.4	0.99975	50.2149	70.1180
44.5	0.99975	50.2153	70.1181
44.6	0.99975	50.2156	70.1182
44.7	0.99975	50.2159	70.1183
44.8	0.99975	50.2162	70.1184
44.9	0.99975	50.2165	70.1185
45.	0.99975	50.2168	70.1186
45.1	0.99975	50.2171	70.1187
45.2	0.99976	50.2174	70.1188
45.3	0.99976	50.2177	70.1189
45.4	0.99976	50.218	70.1190
45.5	0.99976	50.2183	70.1192
45.6	0.99976	50.2186	70.1193
45.7	0.99976	50.2189	70.1194
45.8	0.99976	50.2191	70.1195
45.9	0.99976	50.2194	70.1196
46.	0.99976	50.2197	70.1197
46.1	0.99976	50.22	70.1198
46.2	0.99977	50.2203	70.1199
46.3	0.99977	50.2206	70.1199
46.4	0.99977	50.2208	70.1200
46.5	0.99977	50.2211	70.1201
46.6	0.99977	50.2214	70.1202
46.7	0.99977	50.2217	70.1203

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
46.8	0.99977	50.2219	70.1204
46.9	0.99977	50.2222	70.1205
47.	0.99977	50.2225	70.1206
47.1	0.99977	50.2227	70.1207
47.2	0.99978	50.223	70.1208
47.3	0.99978	50.2232	70.1209
47.4	0.99978	50.2235	70.1210
47.5	0.99978	50.2238	70.1211
47.6	0.99978	50.224	70.1212
47.7	0.99978	50.2243	70.1212
47.8	0.99978	50.2245	70.1213
47.9	0.99978	50.2248	70.1214
48.	0.99978	50.225	70.1215
48.1	0.99978	50.2253	70.1216
48.2	0.99978	50.2255	70.1217
48.3	0.99979	50.2258	70.1218
48.4	0.99979	50.226	70.1219
48.5	0.99979	50.2263	70.1219
48.6	0.99979	50.2265	70.1220
48.7	0.99979	50.2267	70.1221
48.8	0.99979	50.227	70.1222
48.9	0.99979	50.2272	70.1223
49.	0.99979	50.2274	70.1224
49.1	0.99979	50.2277	70.1224
49.2	0.99979	50.2279	70.1225
49.3	0.99979	50.2281	70.1226
49.4	0.9998	50.2284	70.1227
49.5	0.9998	50.2286	70.1228
49.6	0.9998	50.2288	70.1228
49.7	0.9998	50.229	70.1229
49.8	0.9998	50.2293	70.1230
49.9	0.9998	50.2295	70.1231
50.	0.9998	50.2297	70.1231

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
50.1	0.9998	50.2299	70.1232
50.2	0.9998	50.2302	70.1233
50.3	0.9998	50.2304	70.1234
50.4	0.9998	50.2306	70.1235
50.5	0.9998	50.2308	70.1235
50.6	0.9998	50.231	70.1236
50.7	0.99981	50.2312	70.1237
50.8	0.99981	50.2314	70.1237
50.9	0.99981	50.2316	70.1238
51.	0.99981	50.2319	70.1239
51.1	0.99981	50.2321	70.1240
51.2	0.99981	50.2323	70.1240
51.3	0.99981	50.2325	70.1241
51.4	0.99981	50.2327	70.1242
51.5	0.99981	50.2329	70.1243
51.6	0.99981	50.2331	70.1243
51.7	0.99981	50.2333	70.1244
51.8	0.99981	50.2335	70.1245
51.9	0.99981	50.2337	70.1245
52.	0.99982	50.2339	70.1246
52.1	0.99982	50.2341	70.1247
52.2	0.99982	50.2343	70.1247
52.3	0.99982	50.2345	70.1248
52.4	0.99982	50.2346	70.1249
52.5	0.99982	50.2348	70.1249
52.6	0.99982	50.235	70.1250
52.7	0.99982	50.2352	70.1251
52.8	0.99982	50.2354	70.1251
52.9	0.99982	50.2356	70.1252
53.	0.99982	50.2358	70.1253
53.1	0.99982	50.236	70.1253
53.2	0.99982	50.2361	70.1254
53.3	0.99982	50.2363	70.1255

Table 8.2: Deflection points for k=1.3 (continue)

M_x	M_y	δ_{max}	θ_{max}
53.4	0.99982	50.2365	70.1255
53.5	0.99983	50.2367	70.1256
53.6	0.99983	50.2369	70.1256
53.7	0.99983	50.2371	70.1257
53.8	0.99983	50.2372	70.1258
53.9	0.99983	50.2374	70.1258
54.	0.99983	50.2376	70.1259
54.1	0.99983	50.2378	70.1260
54.2	0.99983	50.2379	70.1260
54.3	0.99983	50.2381	70.1261
54.4	0.99983	50.2383	70.1261
54.5	0.99983	50.2384	70.1262
54.6	0.99983	50.2386	70.1263
54.7	0.99983	50.2388	70.1263
54.8	0.99983	50.2389	70.1264
54.9	0.99983	50.2391	70.1264
55.	0.99983	50.2393	70.1265
55.1	0.99984	50.2394	70.1265
55.2	0.99984	50.2396	70.1266
55.3	0.99984	50.2398	70.1267
55.4	0.99984	50.2399	70.1267
55.5	0.99984	50.2401	70.1268
55.6	0.99984	50.2403	70.1268
55.7	0.99984	50.2404	70.1269
55.8	0.99984	50.2406	70.1269
55.9	0.99984	50.2407	70.1270
56.	0.99984	50.2409	70.1271
56.1	0.99984	50.2411	70.1271
56.2	0.99984	50.2412	70.1272
56.3	0.99984	50.2414	70.1272
56.4	0.99984	50.2415	70.1273
56.5	0.99984	50.2417	70.1273
56.6	0.99984	50.2418	70.1274

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
56.7	0.99984	50.242	70.1274
56.8	0.99985	50.2421	70.1275
56.9	0.99985	50.2423	70.1275
57.	0.99985	50.2424	70.1276
57.1	0.99985	50.2426	70.1276
57.2	0.99985	50.2427	70.1277
57.3	0.99985	50.2429	70.1277
57.4	0.99985	50.243	70.1278
57.5	0.99985	50.2432	70.1278
57.6	0.99985	50.2433	70.1279
57.7	0.99985	50.2434	70.1279
57.8	0.99985	50.2436	70.1280
57.9	0.99985	50.2437	70.1280
58.	0.99985	50.2439	70.1281
58.1	0.99985	50.244	70.1281
58.2	0.99985	50.2442	70.1282
58.3	0.99985	50.2443	70.1282
58.4	0.99985	50.2444	70.1283
58.5	0.99985	50.2446	70.1283
58.6	0.99985	50.2447	70.1284
58.7	0.99985	50.2448	70.1284
58.8	0.99986	50.245	70.1285
58.9	0.99986	50.2451	70.1285
59.	0.99986	50.2453	70.1286
59.1	0.99986	50.2454	70.1286
59.2	0.99986	50.2455	70.1287
59.3	0.99986	50.2457	70.1287
59.4	0.99986	50.2458	70.1288
59.5	0.99986	50.2459	70.1288
59.6	0.99986	50.246	70.1289
59.7	0.99986	50.2462	70.1289
59.8	0.99986	50.2463	70.1289
59.9	0.99986	50.2464	70.1290

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
60.	0.99986	50.2466	70.1290
60.1	0.99986	50.2467	70.1291
60.2	0.99986	50.2468	70.1291
60.3	0.99986	50.2469	70.1292
60.4	0.99986	50.2471	70.1292
60.5	0.99986	50.2472	70.1293
60.6	0.99986	50.2473	70.1293
60.7	0.99986	50.2474	70.1293
60.8	0.99986	50.2476	70.1294
60.9	0.99987	50.2477	70.1294
61.	0.99987	50.2478	70.1295
61.1	0.99987	50.2479	70.1295
61.2	0.99987	50.248	70.1296
61.3	0.99987	50.2482	70.1296
61.4	0.99987	50.2483	70.1296
61.5	0.99987	50.2484	70.1297
61.6	0.99987	50.2485	70.1297
61.7	0.99987	50.2486	70.1298
61.8	0.99987	50.2488	70.1298
61.9	0.99987	50.2489	70.1298
62.	0.99987	50.249	70.1299
62.1	0.99987	50.2491	70.1299
62.2	0.99987	50.2492	70.1300
62.3	0.99987	50.2493	70.1300
62.4	0.99987	50.2494	70.1300
62.5	0.99987	50.2496	70.1301
62.6	0.99987	50.2497	70.1301
62.7	0.99987	50.2498	70.1302
62.8	0.99987	50.2499	70.1302
62.9	0.99987	50.25	70.1302
63.	0.99987	50.2501	70.1303
63.1	0.99987	50.2502	70.1303
63.2	0.99987	50.2503	70.1304

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
63.3	0.99988	50.2504	70.1304
63.4	0.99988	50.2506	70.1304
63.5	0.99988	50.2507	70.1305
63.6	0.99988	50.2508	70.1305
63.7	0.99988	50.2509	70.1305
63.8	0.99988	50.251	70.1306
63.9	0.99988	50.2511	70.1306
64.	0.99988	50.2512	70.1307
64.1	0.99988	50.2513	70.1307
64.2	0.99988	50.2514	70.1307
64.3	0.99988	50.2515	70.1308
64.4	0.99988	50.2516	70.1308
64.5	0.99988	50.2517	70.1308
64.6	0.99988	50.2518	70.1309
64.7	0.99988	50.2519	70.1309
64.8	0.99988	50.252	70.1309
64.9	0.99988	50.2521	70.1310
65.	0.99988	50.2522	70.1310
65.1	0.99988	50.2523	70.1310
65.2	0.99988	50.2524	70.1311
65.3	0.99988	50.2525	70.1311
65.4	0.99988	50.2526	70.1312
65.5	0.99988	50.2527	70.1312
65.6	0.99988	50.2528	70.1312
65.7	0.99988	50.2529	70.1313
65.8	0.99988	50.253	70.1313
65.9	0.99988	50.2531	70.1313
66.	0.99989	50.2532	70.1314
66.1	0.99989	50.2533	70.1314
66.2	0.99989	50.2534	70.1314
66.3	0.99989	50.2535	70.1315
66.4	0.99989	50.2536	70.1315
66.5	0.99989	50.2537	70.1315

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
66.6	0.99989	50.2538	70.1316
66.7	0.99989	50.2539	70.1316
66.8	0.99989	50.254	70.1316
66.9	0.99989	50.2541	70.1317
67.	0.99989	50.2541	70.1317
67.1	0.99989	50.2542	70.1317
67.2	0.99989	50.2543	70.1317
67.3	0.99989	50.2544	70.1318
67.4	0.99989	50.2545	70.1318
67.5	0.99989	50.2546	70.1318
67.6	0.99989	50.2547	70.1319
67.7	0.99989	50.2548	70.1319
67.8	0.99989	50.2549	70.1319
67.9	0.99989	50.255	70.1320
68.	0.99989	50.255	70.1320
68.1	0.99989	50.2551	70.1320
68.2	0.99989	50.2552	70.1321
68.3	0.99989	50.2553	70.1321
68.4	0.99989	50.2554	70.1321
68.5	0.99989	50.2555	70.1321
68.6	0.99989	50.2556	70.1322
68.7	0.99989	50.2556	70.1322
68.8	0.99989	50.2557	70.1322
68.9	0.99989	50.2558	70.1323
69.	0.9999	50.2559	70.1323
69.1	0.9999	50.256	70.1323
69.2	0.9999	50.2561	70.1324
69.3	0.9999	50.2561	70.1324
69.4	0.9999	50.2562	70.1324
69.5	0.9999	50.2563	70.1324
69.6	0.9999	50.2564	70.1325
69.7	0.9999	50.2565	70.1325
69.8	0.9999	50.2566	70.1325

Table 8.2: Deflection points for k=1.3 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
69.9	0.9999	50.2566	70.1326
70.	0.9999	50.2567	70.1326

8.1.3 Deflection Point for k=1.4

Table 8.3: Deflection points for k=1.4

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
1.	1.		90
1.01	0.99671	0.051562	85.36
1.02	0.99352	0.14467	83.49
1.03	0.99042	0.26362	82.08
1.04	0.9874	0.40259	80.93
1.05	0.98448	0.55808	79.94
1.06	0.98164	0.72766	79.06
1.07	0.97889	0.90949	78.27
1.08	0.97622	1.102	77.56
1.09	0.97364	1.304	76.9
1.1	0.97113	1.515	76.3
1.11	0.96871	1.734	75.73
1.12	0.96636	1.959	75.21
1.13	0.96409	2.191	74.72
1.14	0.9619	2.428	74.26
1.15	0.95978	2.671	73.82
1.16	0.95774	2.918	73.41
1.17	0.95576	3.169	73.02
1.18	0.95385	3.424	72.66
1.19	0.95201	3.683	72.31
1.2	0.95024	3.944	71.98
1.21	0.94854	4.208	71.66
1.22	0.94689	4.475	71.36
1.23	0.94531	4.743	71.07
1.24	0.94379	5.014	70.8

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
1.25	0.94233	5.286	70.54
1.26	0.94093	5.559	70.29
1.27	0.93958	5.834	70.05
1.28	0.93829	6.109	69.82
1.29	0.93705	6.385	69.6
1.3	0.93587	6.662	69.4
1.31	0.93473	6.939	69.19
1.32	0.93365	7.217	69
1.33	0.93262	7.494	68.82
1.34	0.93163	7.771	68.64
1.35	0.93069	8.048	68.47
1.36	0.92979	8.325	68.31
1.37	0.92893	8.602	68.15
1.38	0.92812	8.878	68
1.39	0.92735	9.153	67.85
1.4	0.92662	9.427	67.72
1.41	0.92593	9.701	67.58
1.42	0.92528	9.973	67.45
1.43	0.92466	10.25	67.33
1.44	0.92408	10.52	67.21
1.45	0.92353	10.79	67.1
1.46	0.92302	11.05	66.99
1.47	0.92254	11.32	66.88
1.48	0.92209	11.59	66.78
1.49	0.92168	11.85	66.68
1.5	0.92129	12.11	66.59
1.51	0.92093	12.37	66.5
1.52	0.9206	12.63	66.41
1.53	0.92029	12.89	66.33
1.54	0.92001	13.15	66.25
1.55	0.91976	13.4	66.17
1.56	0.91953	13.66	66.1
1.57	0.91932	13.91	66.03

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
1.58	0.91914	14.16	65.96
1.59	0.91898	14.41	65.89
1.6	0.91884	14.65	65.83
1.61	0.91872	14.9	65.77
1.62	0.91862	15.14	65.71
1.63	0.91854	15.38	65.65
1.64	0.91848	15.62	65.6
1.65	0.91844	15.86	65.55
1.66	0.91841	16.09	65.5
1.67	0.9184	16.32	65.45
1.68	0.91841	16.55	65.4
1.69	0.91843	16.78	65.36
1.7	0.91847	17.01	65.32
1.71	0.91852	17.24	65.28
1.72	0.91859	17.46	65.24
1.73	0.91867	17.68	65.2
1.74	0.91876	17.9	65.17
1.75	0.91886	18.12	65.13
1.76	0.91898	18.34	65.1
1.77	0.9191	18.55	65.07
1.78	0.91924	18.76	65.04
1.79	0.91939	18.97	65.01
1.8	0.91955	19.18	64.99
1.81	0.91971	19.39	64.96
1.82	0.91989	19.59	64.94
1.83	0.92008	19.8	64.91
1.84	0.92027	2	64.89
1.85	0.92047	20.2	64.87
1.86	0.92068	20.4	64.85
1.87	0.9209	20.59	64.83
1.88	0.92112	20.79	64.82
1.89	0.92135	20.98	64.8
1.9	0.92159	21.17	64.78

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
1.91	0.92183	21.36	64.77
1.92	0.92208	21.54	64.75
1.93	0.92234	21.73	64.74
1.94	0.9226	21.91	64.73
1.95	0.92286	22.09	64.72
1.96	0.92313	22.27	64.71
1.97	0.92341	22.45	64.7
1.98	0.92369	22.63	64.69
1.99	0.92397	22.8	64.68
2	0.92426	22.97	64.67
2.02	0.92484	23.31	64.65
2.04	0.92544	23.65	64.64
2.06	0.92604	23.98	64.63
2.08	0.92666	24.3	64.63
2.1	0.92729	24.61	64.62
2.12	0.92792	24.92	64.62
2.14	0.92856	25.23	64.62
2.16	0.9292	25.52	64.62
2.18	0.92985	25.82	64.62
2.2	0.9305	26.1	64.62
2.22	0.93116	26.38	64.62
2.24	0.93181	26.66	64.63
2.26	0.93247	26.93	64.64
2.28	0.93313	27.19	64.64
2.3	0.93378	27.45	64.65
2.32	0.93444	27.71	64.66
2.34	0.93509	27.96	64.67
2.36	0.93574	28.2	64.68
2.38	0.93639	28.45	64.7
2.4	0.93704	28.68	64.71
2.42	0.93768	28.91	64.72
2.44	0.93832	29.14	64.74
2.46	0.93896	29.36	64.75

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
2.48	0.93959	29.58	64.77
2.5	0.94021	29.8	64.78
2.52	0.94083	30.01	64.8
2.54	0.94145	30.22	64.81
2.56	0.94206	30.42	64.83
2.58	0.94267	30.62	64.85
2.6	0.94327	30.81	64.87
2.62	0.94387	31.01	64.88
2.64	0.94446	31.19	64.9
2.66	0.94504	31.38	64.92
2.68	0.94562	31.56	64.94
2.7	0.94619	31.74	64.96
2.72	0.94676	31.92	64.97
2.74	0.94732	32.09	64.99
2.76	0.94787	32.26	65.01
2.78	0.94842	32.42	65.03
2.8	0.94896	32.59	65.05
2.82	0.9495	32.75	65.07
2.84	0.95003	32.91	65.09
2.86	0.95055	33.06	65.11
2.88	0.95107	33.21	65.13
2.9	0.95158	33.36	65.15
2.92	0.95209	33.51	65.16
2.94	0.95258	33.65	65.18
2.96	0.95308	33.8	65.2
2.98	0.95357	33.94	65.22
3	0.95405	34.07	65.24
3.02	0.95452	34.21	65.26
3.04	0.95499	34.34	65.28
3.06	0.95545	34.47	65.3
3.08	0.95591	34.6	65.32
3.1	0.95636	34.73	65.34
3.12	0.95681	34.85	65.35

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
3.14	0.95725	34.97	65.37
3.16	0.95769	35.09	65.39
3.18	0.95812	35.21	65.41
3.2	0.95854	35.33	65.43
3.22	0.95896	35.44	65.45
3.24	0.95937	35.55	65.46
3.26	0.95978	35.67	65.48
3.28	0.96018	35.77	65.5
3.3	0.96058	35.88	65.52
3.32	0.96097	35.99	65.54
3.34	0.96136	36.09	65.55
3.36	0.96174	36.19	65.57
3.38	0.96212	36.29	65.59
3.4	0.96249	36.39	65.6
3.42	0.96286	36.49	65.62
3.44	0.96322	36.59	65.64
3.46	0.96358	36.68	65.66
3.48	0.96394	36.78	65.67
3.5	0.96428	36.87	65.69
3.52	0.96463	36.96	65.71
3.54	0.96497	37.05	65.72
3.56	0.9653	37.13	65.74
3.58	0.96564	37.22	65.75
3.6	0.96596	37.31	65.77
3.62	0.96629	37.39	65.79
3.64	0.96661	37.47	65.8
3.66	0.96692	37.55	65.82
3.68	0.96723	37.63	65.83
3.7	0.96754	37.71	65.85
3.72	0.96784	37.79	65.86
3.74	0.96814	37.87	65.88
3.76	0.96843	37.94	65.89
3.78	0.96873	38.02	65.91

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
3.8	0.96901	38.09	65.92
3.82	0.9693	38.16	65.94
3.84	0.96958	38.24	65.95
3.86	0.96986	38.31	65.96
3.88	0.97013	38.38	65.98
3.9	0.9704	38.44	65.99
3.92	0.97067	38.51	66.01
3.94	0.97093	38.58	66.02
3.96	0.97119	38.64	66.03
3.98	0.97145	38.71	66.05
4	0.9717	38.77	66.06
4.02	0.97195	38.84	66.07
4.04	0.9722	38.9	66.09
4.06	0.97244	38.96	66.1
4.08	0.97268	39.02	66.11
4.1	0.97292	39.08	66.12
4.12	0.97316	39.14	66.14
4.14	0.97339	39.2	66.15
4.16	0.97362	39.26	66.16
4.18	0.97385	39.31	66.17
4.2	0.97407	39.37	66.18
4.22	0.97429	39.42	66.2
4.24	0.97451	39.48	66.21
4.26	0.97473	39.53	66.22
4.28	0.97494	39.58	66.23
4.3	0.97515	39.64	66.24
4.32	0.97536	39.69	66.25
4.34	0.97557	39.74	66.27
4.36	0.97577	39.79	66.28
4.38	0.97597	39.84	66.29
4.4	0.97617	39.89	66.3
4.42	0.97637	39.94	66.31
4.44	0.97656	39.99	66.32

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
4.46	0.97675	40.03	66.33
4.48	0.97694	40.08	66.34
4.5	0.97713	40.13	66.35
4.52	0.97732	40.17	66.36
4.54	0.9775	40.22	66.37
4.56	0.97768	40.26	66.38
4.58	0.97786	40.31	66.39
4.6	0.97804	40.35	66.4
4.62	0.97821	40.39	66.41
4.64	0.97838	40.43	66.42
4.66	0.97855	40.48	66.43
4.68	0.97872	40.52	66.44
4.7	0.97889	40.56	66.45
4.72	0.97906	40.6	66.46
4.74	0.97922	40.64	66.47
4.76	0.97938	40.68	66.48
4.78	0.97954	40.72	66.49
4.8	0.9797	40.76	66.5
4.82	0.97985	40.79	66.51
4.84	0.98001	40.83	66.52
4.86	0.98016	40.87	66.52
4.88	0.98031	40.91	66.53
4.9	0.98046	40.94	66.54
4.92	0.98061	40.98	66.55
4.94	0.98076	41.01	66.56
4.96	0.9809	41.05	66.57
4.98	0.98104	41.08	66.58
5	0.98118	41.12	66.58
5.04	0.98146	41.19	66.6
5.08	0.98174	41.25	66.62
5.12	0.982	41.32	66.63
5.16	0.98226	41.38	66.65
5.2	0.98252	41.44	66.66

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
5.24	0.98277	41.5	66.68
5.28	0.98301	41.56	66.69
5.32	0.98325	41.62	66.71
5.36	0.98349	41.68	66.72
5.4	0.98372	41.73	66.73
5.44	0.98395	41.78	66.75
5.48	0.98417	41.84	66.76
5.52	0.98438	41.89	66.77
5.56	0.9846	41.94	66.79
5.6	0.9848	41.99	66.8
5.64	0.98501	42.04	66.81
5.68	0.98521	42.09	66.82
5.72	0.9854	42.14	66.84
5.76	0.9856	42.18	66.85
5.8	0.98578	42.23	66.86
5.84	0.98597	42.27	66.87
5.88	0.98615	42.31	66.88
5.92	0.98633	42.36	66.89
5.96	0.9865	42.4	66.9
6	0.98668	42.44	66.91
6.04	0.98684	42.48	66.92
6.08	0.98701	42.52	66.93
6.12	0.98717	42.56	66.94
6.16	0.98733	42.6	66.95
6.2	0.98749	42.63	66.96
6.24	0.98764	42.67	66.97
6.28	0.98779	42.71	66.98
6.32	0.98794	42.74	66.99
6.36	0.98808	42.78	67
6.4	0.98823	42.81	67.01
6.44	0.98837	42.84	67.02
6.48	0.98851	42.88	67.03
6.52	0.98864	42.91	67.04

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
6.56	0.98877	42.94	67.04
6.6	0.98891	42.97	67.05
6.64	0.98903	43	67.06
6.68	0.98916	43.03	67.07
6.72	0.98928	43.06	67.08
6.76	0.98941	43.09	67.08
6.8	0.98953	43.12	67.09
6.84	0.98964	43.15	67.1
6.88	0.98976	43.17	67.11
6.92	0.98988	43.2	67.11
6.96	0.98999	43.23	67.12
7	0.9901	43.25	67.13
7.04	0.99021	43.28	67.14
7.08	0.99031	43.31	67.14
7.12	0.99042	43.33	67.15
7.16	0.99052	43.36	67.16
7.2	0.99062	43.38	67.16
7.24	0.99072	43.4	67.17
7.28	0.99082	43.43	67.18
7.32	0.99092	43.45	67.18
7.36	0.99102	43.47	67.19
7.4	0.99111	43.49	67.19
7.44	0.9912	43.52	67.2
7.48	0.99129	43.54	67.21
7.52	0.99138	43.56	67.21
7.56	0.99147	43.58	67.22
7.6	0.99156	43.6	67.22
7.64	0.99165	43.62	67.23
7.68	0.99173	43.64	67.23
7.72	0.99181	43.66	67.24
7.76	0.9919	43.68	67.24
7.8	0.99198	43.7	67.25
7.84	0.99206	43.72	67.26

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
7.88	0.99214	43.74	67.26
7.92	0.99221	43.76	67.27
7.96	0.99229	43.77	67.27
8	0.99236	43.79	67.28
8.04	0.99244	43.81	67.28
8.08	0.99251	43.83	67.28
8.12	0.99258	43.84	67.29
8.16	0.99265	43.86	67.29
8.2	0.99272	43.88	67.3
8.24	0.99279	43.89	67.3
8.28	0.99286	43.91	67.31
8.32	0.99293	43.92	67.31
8.36	0.99299	43.94	67.32
8.4	0.99306	43.95	67.32
8.44	0.99312	43.97	67.32
8.48	0.99319	43.98	67.33
8.52	0.99325	44	67.33
8.56	0.99331	44.01	67.34
8.6	0.99337	44.03	67.34
8.64	0.99343	44.04	67.35
8.68	0.99349	44.06	67.35
8.72	0.99355	44.07	67.35
8.76	0.99361	44.08	67.36
8.8	0.99366	44.1	67.36
8.84	0.99372	44.11	67.36
8.88	0.99377	44.12	67.37
8.92	0.99383	44.14	67.37
8.96	0.99388	44.15	67.38
9	0.99394	44.16	67.38
9.04	0.99399	44.17	67.38
9.08	0.99404	44.19	67.39
9.12	0.99409	44.2	67.39
9.16	0.99414	44.21	67.39

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
9.2	0.99419	44.22	67.4
9.24	0.99424	44.23	67.4
9.28	0.99429	44.25	67.4
9.32	0.99434	44.26	67.41
9.36	0.99439	44.27	67.41
9.4	0.99443	44.28	67.41
9.44	0.99448	44.29	67.41
9.48	0.99453	44.3	67.42
9.52	0.99457	44.31	67.42
9.56	0.99462	44.32	67.42
9.6	0.99466	44.33	67.43
9.64	0.9947	44.34	67.43
9.68	0.99475	44.35	67.43
9.72	0.99479	44.36	67.44
9.76	0.99483	44.37	67.44
9.8	0.99487	44.38	67.44
9.84	0.99491	44.39	67.44
9.88	0.99495	44.4	67.45
9.92	0.99499	44.41	67.45
9.96	0.99503	44.42	67.45
1	0.99507	44.43	67.45
10.1	0.99517	44.45	67.46
10.2	0.99526	44.47	67.47
10.3	0.99535	44.49	67.47
10.4	0.99544	44.52	67.48
10.5	0.99552	44.54	67.48
10.6	0.99561	44.55	67.49
10.7	0.99569	44.57	67.5
10.8	0.99577	44.59	67.5
10.9	0.99584	44.61	67.51
11	0.99592	44.63	67.51
11.1	0.99599	44.64	67.52
11.2	0.99606	44.66	67.52

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
11.3	0.99613	44.68	67.53
11.4	0.9962	44.69	67.53
11.5	0.99626	44.71	67.53
11.6	0.99632	44.72	67.54
11.7	0.99639	44.74	67.54
11.8	0.99645	44.75	67.55
11.9	0.9965	44.77	67.55
12	0.99656	44.78	67.55
12.1	0.99662	44.79	67.56
12.2	0.99667	44.81	67.56
12.3	0.99673	44.82	67.57
12.4	0.99678	44.83	67.57
12.5	0.99683	44.84	67.57
12.6	0.99688	44.85	67.58
12.7	0.99693	44.86	67.58
12.8	0.99697	44.88	67.58
12.9	0.99702	44.89	67.59
13	0.99707	44.9	67.59
13.1	0.99711	44.91	67.59
13.2	0.99715	44.92	67.6
13.3	0.9972	44.93	67.6
13.4	0.99724	44.94	67.6
13.5	0.99728	44.95	67.6
13.6	0.99732	44.96	67.61
13.7	0.99736	44.97	67.61
13.8	0.99739	44.97	67.61
13.9	0.99743	44.98	67.61
14	0.99747	44.99	67.62
14.1	0.9975	45	67.62
14.2	0.99754	45.01	67.62
14.3	0.99757	45.02	67.62
14.4	0.99761	45.02	67.63
14.5	0.99764	45.03	67.63

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
14.6	0.99767	45.04	67.63
14.7	0.9977	45.05	67.63
14.8	0.99773	45.05	67.63
14.9	0.99776	45.06	67.64
15	0.99779	45.07	67.64
15.1	0.99782	45.07	67.64
15.2	0.99785	45.08	67.64
15.3	0.99788	45.09	67.64
15.4	0.9979	45.09	67.65
15.5	0.99793	45.1	67.65
15.6	0.99796	45.11	67.65
15.7	0.99798	45.11	67.65
15.8	0.99801	45.12	67.65
15.9	0.99803	45.12	67.66
16	0.99806	45.13	67.66
16.1	0.99808	45.14	67.66
16.2	0.99811	45.14	67.66
16.3	0.99813	45.15	67.66
16.4	0.99815	45.15	67.66
16.5	0.99817	45.16	67.67
16.6	0.99819	45.16	67.67
16.7	0.99822	45.17	67.67
16.8	0.99824	45.17	67.67
16.9	0.99826	45.18	67.67
17	0.99828	45.18	67.67
17.1	0.9983	45.19	67.67
17.2	0.99832	45.19	67.68
17.3	0.99834	45.2	67.68
17.4	0.99836	45.2	67.68
17.5	0.99837	45.2	67.68
17.6	0.99839	45.21	67.68
17.7	0.99841	45.21	67.68
17.8	0.99843	45.22	67.68

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
17.9	0.99845	45.22	67.68
18	0.99846	45.23	67.69
18.1	0.99848	45.23	67.69
18.2	0.9985	45.23	67.69
18.3	0.99851	45.24	67.69
18.4	0.99853	45.24	67.69
18.5	0.99855	45.24	67.69
18.6	0.99856	45.25	67.69
18.7	0.99858	45.25	67.69
18.8	0.99859	45.25	67.69
18.9	0.99861	45.26	67.7
19	0.99862	45.26	67.7
19.1	0.99863	45.27	67.7
19.2	0.99865	45.27	67.7
19.3	0.99866	45.27	67.7
19.4	0.99868	45.27	67.7
19.5	0.99869	45.28	67.7
19.6	0.9987	45.28	67.7
19.7	0.99872	45.28	67.7
19.8	0.99873	45.29	67.7
19.9	0.99874	45.29	67.7
2	0.99875	45.29	67.71
20.1	0.99877	45.3	67.71
20.2	0.99878	45.3	67.71
20.3	0.99879	45.3	67.71
20.4	0.9988	45.3	67.71
20.5	0.99881	45.31	67.71
20.6	0.99883	45.31	67.71
20.7	0.99884	45.31	67.71
20.8	0.99885	45.32	67.71
20.9	0.99886	45.32	67.71
21	0.99887	45.32	67.71
21.1	0.99888	45.32	67.71

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
21.2	0.99889	45.33	67.71
21.3	0.9989	45.33	67.72
21.4	0.99891	45.33	67.72
21.5	0.99892	45.33	67.72
21.6	0.99893	45.33	67.72
21.7	0.99894	45.34	67.72
21.8	0.99895	45.34	67.72
21.9	0.99896	45.34	67.72
22	0.99897	45.34	67.72
22.1	0.99898	45.35	67.72
22.2	0.99899	45.35	67.72
22.3	0.999	45.35	67.72
22.4	0.99901	45.35	67.72
22.5	0.99902	45.35	67.72
22.6	0.99902	45.36	67.72
22.7	0.99903	45.36	67.72
22.8	0.99904	45.36	67.73
22.9	0.99905	45.36	67.73
23	0.99906	45.36	67.73
23.1	0.99907	45.37	67.73
23.2	0.99907	45.37	67.73
23.3	0.99908	45.37	67.73
23.4	0.99909	45.37	67.73
23.5	0.9991	45.37	67.73
23.6	0.9991	45.38	67.73
23.7	0.99911	45.38	67.73
23.8	0.99912	45.38	67.73
23.9	0.99913	45.38	67.73
24	0.99913	45.38	67.73
24.1	0.99914	45.38	67.73
24.2	0.99915	45.39	67.73
24.3	0.99916	45.39	67.73
24.4	0.99916	45.39	67.73

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
24.5	0.99917	45.39	67.73
24.6	0.99918	45.39	67.73
24.7	0.99918	45.39	67.74
24.8	0.99919	45.39	67.74
24.9	0.9992	45.4	67.74
25	0.9992	45.4	67.74
25.1	0.99921	45.4	67.74
25.2	0.99921	45.4	67.74
25.3	0.99922	45.4	67.74
25.4	0.99923	45.4	67.74
25.5	0.99923	45.41	67.74
25.6	0.99924	45.41	67.74
25.7	0.99924	45.41	67.74
25.8	0.99925	45.41	67.74
25.9	0.99926	45.41	67.74
26	0.99926	45.41	67.74
26.1	0.99927	45.41	67.74
26.2	0.99927	45.41	67.74
26.3	0.99928	45.42	67.74
26.4	0.99928	45.42	67.74
26.5	0.99929	45.42	67.74
26.6	0.99929	45.42	67.74
26.7	0.9993	45.42	67.74
26.8	0.99931	45.42	67.74
26.9	0.99931	45.42	67.74
27	0.99932	45.42	67.74
27.1	0.99932	45.43	67.74
27.2	0.99933	45.43	67.75
27.3	0.99933	45.43	67.75
27.4	0.99934	45.43	67.75
27.5	0.99934	45.43	67.75
27.6	0.99934	45.43	67.75
27.7	0.99935	45.43	67.75

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
27.8	0.99935	45.43	67.75
27.9	0.99936	45.43	67.75
28	0.99936	45.44	67.75
28.1	0.99937	45.44	67.75
28.2	0.99937	45.44	67.75
28.3	0.99938	45.44	67.75
28.4	0.99938	45.44	67.75
28.5	0.99939	45.44	67.75
28.6	0.99939	45.44	67.75
28.7	0.99939	45.44	67.75
28.8	0.9994	45.44	67.75
28.9	0.9994	45.44	67.75
29	0.99941	45.45	67.75
29.1	0.99941	45.45	67.75
29.2	0.99941	45.45	67.75
29.3	0.99942	45.45	67.75
29.4	0.99942	45.45	67.75
29.5	0.99943	45.45	67.75
29.6	0.99943	45.45	67.75
29.7	0.99943	45.45	67.75
29.8	0.99944	45.45	67.75
29.9	0.99944	45.45	67.75
3	0.99945	45.45	67.75
30.1	0.99945	45.46	67.75
30.2	0.99945	45.46	67.75
30.3	0.99946	45.46	67.75
30.4	0.99946	45.46	67.75
30.5	0.99946	45.46	67.75
30.6	0.99947	45.46	67.76
30.7	0.99947	45.46	67.76
30.8	0.99947	45.46	67.76
30.9	0.99948	45.46	67.76
31	0.99948	45.46	67.76

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
31.1	0.99948	45.46	67.76
31.2	0.99949	45.46	67.76
31.3	0.99949	45.47	67.76
31.4	0.99949	45.47	67.76
31.5	0.9995	45.47	67.76
31.6	0.9995	45.47	67.76
31.7	0.9995	45.47	67.76
31.8	0.99951	45.47	67.76
31.9	0.99951	45.47	67.76
32	0.99951	45.47	67.76
32.1	0.99952	45.47	67.76
32.2	0.99952	45.47	67.76
32.3	0.99952	45.47	67.76
32.4	0.99952	45.47	67.76
32.5	0.99953	45.47	67.76
32.6	0.99953	45.47	67.76
32.7	0.99953	45.48	67.76
32.8	0.99954	45.48	67.76
32.9	0.99954	45.48	67.76
33	0.99954	45.48	67.76
33.1	0.99954	45.48	67.76
33.2	0.99955	45.48	67.76
33.3	0.99955	45.48	67.76
33.4	0.99955	45.48	67.76
33.5	0.99956	45.48	67.76
33.6	0.99956	45.48	67.76
33.7	0.99956	45.48	67.76
33.8	0.99956	45.48	67.76
33.9	0.99957	45.48	67.76
34	0.99957	45.48	67.76
34.1	0.99957	45.48	67.76
34.2	0.99957	45.48	67.76
34.3	0.99958	45.49	67.76

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
34.4	0.99958	45.49	67.76
34.5	0.99958	45.49	67.76
34.6	0.99958	45.49	67.76
34.7	0.99959	45.49	67.76
34.8	0.99959	45.49	67.76
34.9	0.99959	45.49	67.76
35	0.99959	45.49	67.76
35.1	0.99959	45.49	67.76
35.2	0.9996	45.49	67.76
35.3	0.9996	45.49	67.76
35.4	0.9996	45.49	67.76
35.5	0.9996	45.49	67.76
35.6	0.99961	45.49	67.76
35.7	0.99961	45.49	67.76
35.8	0.99961	45.49	67.77
35.9	0.99961	45.49	67.77
36	0.99961	45.49	67.77
36.1	0.99962	45.5	67.77
36.2	0.99962	45.5	67.77
36.3	0.99962	45.5	67.77
36.4	0.99962	45.5	67.77
36.5	0.99963	45.5	67.77
36.6	0.99963	45.5	67.77
36.7	0.99963	45.5	67.77
36.8	0.99963	45.5	67.77
36.9	0.99963	45.5	67.77
37	0.99964	45.5	67.77
37.1	0.99964	45.5	67.77
37.2	0.99964	45.5	67.77
37.3	0.99964	45.5	67.77
37.4	0.99964	45.5	67.77
37.5	0.99964	45.5	67.77
37.6	0.99965	45.5	67.77

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
37.7	0.99965	45.5	67.77
37.8	0.99965	45.5	67.77
37.9	0.99965	45.5	67.77
38	0.99965	45.5	67.77
38.1	0.99966	45.5	67.77
38.2	0.99966	45.5	67.77
38.3	0.99966	45.51	67.77
38.4	0.99966	45.51	67.77
38.5	0.99966	45.51	67.77
38.6	0.99966	45.51	67.77
38.7	0.99967	45.51	67.77
38.8	0.99967	45.51	67.77
38.9	0.99967	45.51	67.77
39	0.99967	45.51	67.77
39.1	0.99967	45.51	67.77
39.2	0.99967	45.51	67.77
39.3	0.99968	45.51	67.77
39.4	0.99968	45.51	67.77
39.5	0.99968	45.51	67.77
39.6	0.99968	45.51	67.77
39.7	0.99968	45.51	67.77
39.8	0.99968	45.51	67.77
39.9	0.99969	45.51	67.77
4	0.99969	45.51	67.77
40.1	0.99969	45.51	67.77
40.2	0.99969	45.51	67.77
40.3	0.99969	45.51	67.77
40.4	0.99969	45.51	67.77
40.5	0.9997	45.51	67.77
40.6	0.9997	45.51	67.77
40.7	0.9997	45.51	67.77
40.8	0.9997	45.51	67.77
40.9	0.9997	45.51	67.77

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
41	0.9997	45.52	67.77
41.1	0.9997	45.52	67.77
41.2	0.99971	45.52	67.77
41.3	0.99971	45.52	67.77
41.4	0.99971	45.52	67.77
41.5	0.99971	45.52	67.77
41.6	0.99971	45.52	67.77
41.7	0.99971	45.52	67.77
41.8	0.99971	45.52	67.77
41.9	0.99972	45.52	67.77
42	0.99972	45.52	67.77
42.1	0.99972	45.52	67.77
42.2	0.99972	45.52	67.77
42.3	0.99972	45.52	67.77
42.4	0.99972	45.52	67.77
42.5	0.99972	45.52	67.77
42.6	0.99972	45.52	67.77
42.7	0.99973	45.52	67.77
42.8	0.99973	45.52	67.77
42.9	0.99973	45.52	67.77
43	0.99973	45.52	67.77
43.1	0.99973	45.52	67.77
43.2	0.99973	45.52	67.77
43.3	0.99973	45.52	67.77
43.4	0.99973	45.52	67.77
43.5	0.99974	45.52	67.77
43.6	0.99974	45.52	67.77
43.7	0.99974	45.52	67.77
43.8	0.99974	45.52	67.77
43.9	0.99974	45.52	67.77
44	0.99974	45.52	67.77
44.1	0.99974	45.52	67.77
44.2	0.99974	45.52	67.77

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
44.3	0.99975	45.53	67.77
44.4	0.99975	45.53	67.77
44.5	0.99975	45.53	67.77
44.6	0.99975	45.53	67.77
44.7	0.99975	45.53	67.77
44.8	0.99975	45.53	67.77
44.9	0.99975	45.53	67.77
45	0.99975	45.53	67.78
45.1	0.99975	45.53	67.78
45.2	0.99976	45.53	67.78
45.3	0.99976	45.53	67.78
45.4	0.99976	45.53	67.78
45.5	0.99976	45.53	67.78
45.6	0.99976	45.53	67.78
45.7	0.99976	45.53	67.78
45.8	0.99976	45.53	67.78
45.9	0.99976	45.53	67.78
46	0.99976	45.53	67.78
46.1	0.99976	45.53	67.78
46.2	0.99977	45.53	67.78
46.3	0.99977	45.53	67.78
46.4	0.99977	45.53	67.78
46.5	0.99977	45.53	67.78
46.6	0.99977	45.53	67.78
46.7	0.99977	45.53	67.78
46.8	0.99977	45.53	67.78
46.9	0.99977	45.53	67.78
47	0.99977	45.53	67.78
47.1	0.99977	45.53	67.78
47.2	0.99978	45.53	67.78
47.3	0.99978	45.53	67.78
47.4	0.99978	45.53	67.78
47.5	0.99978	45.53	67.78

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
47.6	0.99978	45.53	67.78
47.7	0.99978	45.53	67.78
47.8	0.99978	45.53	67.78
47.9	0.99978	45.53	67.78
48	0.99978	45.53	67.78
48.1	0.99978	45.53	67.78
48.2	0.99978	45.53	67.78
48.3	0.99979	45.53	67.78
48.4	0.99979	45.53	67.78
48.5	0.99979	45.53	67.78
48.6	0.99979	45.54	67.78
48.7	0.99979	45.54	67.78
48.8	0.99979	45.54	67.78
48.9	0.99979	45.54	67.78
49	0.99979	45.54	67.78
49.1	0.99979	45.54	67.78
49.2	0.99979	45.54	67.78
49.3	0.99979	45.54	67.78
49.4	0.9998	45.54	67.78
49.5	0.9998	45.54	67.78
49.6	0.9998	45.54	67.78
49.7	0.9998	45.54	67.78
49.8	0.9998	45.54	67.78
49.9	0.9998	45.54	67.78
5	0.9998	45.54	67.78
50.1	0.9998	45.54	67.78
50.2	0.9998	45.54	67.78
50.3	0.9998	45.54	67.78
50.4	0.9998	45.54	67.78
50.5	0.9998	45.54	67.78
50.6	0.9998	45.54	67.78
50.7	0.99981	45.54	67.78
50.8	0.99981	45.54	67.78

Table 8.3: Deflection points for k=1.4 (continue)

M_x	M_y	δ_{max}	θ_{max}
50.9	0.99981	45.54	67.78
51	0.99981	45.54	67.78
51.1	0.99981	45.54	67.78
51.2	0.99981	45.54	67.78
51.3	0.99981	45.54	67.78
51.4	0.99981	45.54	67.78
51.5	0.99981	45.54	67.78
51.6	0.99981	45.54	67.78
51.7	0.99981	45.54	67.78
51.8	0.99981	45.54	67.78
51.9	0.99981	45.54	67.78
52	0.99982	45.54	67.78
52.1	0.99982	45.54	67.78
52.2	0.99982	45.54	67.78
52.3	0.99982	45.54	67.78
52.4	0.99982	45.54	67.78
52.5	0.99982	45.54	67.78
52.6	0.99982	45.54	67.78
52.7	0.99982	45.54	67.78
52.8	0.99982	45.54	67.78
52.9	0.99982	45.54	67.78
53	0.99982	45.54	67.78
53.1	0.99982	45.54	67.78
53.2	0.99982	45.54	67.78
53.3	0.99982	45.54	67.78
53.4	0.99982	45.54	67.78
53.5	0.99983	45.54	67.78
53.6	0.99983	45.54	67.78
53.7	0.99983	45.54	67.78
53.8	0.99983	45.54	67.78
53.9	0.99983	45.54	67.78
54	0.99983	45.54	67.78
54.1	0.99983	45.54	67.78

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
54.2	0.99983	45.54	67.78
54.3	0.99983	45.55	67.78
54.4	0.99983	45.55	67.78
54.5	0.99983	45.55	67.78
54.6	0.99983	45.55	67.78
54.7	0.99983	45.55	67.78
54.8	0.99983	45.55	67.78
54.9	0.99983	45.55	67.78
55	0.99983	45.55	67.78
55.1	0.99984	45.55	67.78
55.2	0.99984	45.55	67.78
55.3	0.99984	45.55	67.78
55.4	0.99984	45.55	67.78
55.5	0.99984	45.55	67.78
55.6	0.99984	45.55	67.78
55.7	0.99984	45.55	67.78
55.8	0.99984	45.55	67.78
55.9	0.99984	45.55	67.78
56	0.99984	45.55	67.78
56.1	0.99984	45.55	67.78
56.2	0.99984	45.55	67.78
56.3	0.99984	45.55	67.78
56.4	0.99984	45.55	67.78
56.5	0.99984	45.55	67.78
56.6	0.99984	45.55	67.78
56.7	0.99984	45.55	67.78
56.8	0.99985	45.55	67.78
56.9	0.99985	45.55	67.78
57	0.99985	45.55	67.78
57.1	0.99985	45.55	67.78
57.2	0.99985	45.55	67.78
57.3	0.99985	45.55	67.78
57.4	0.99985	45.55	67.78

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
57.5	0.99985	45.55	67.78
57.6	0.99985	45.55	67.78
57.7	0.99985	45.55	67.78
57.8	0.99985	45.55	67.78
57.9	0.99985	45.55	67.78
58	0.99985	45.55	67.78
58.1	0.99985	45.55	67.78
58.2	0.99985	45.55	67.78
58.3	0.99985	45.55	67.78
58.4	0.99985	45.55	67.78
58.5	0.99985	45.55	67.78
58.6	0.99985	45.55	67.78
58.7	0.99985	45.55	67.78
58.8	0.99986	45.55	67.78
58.9	0.99986	45.55	67.78
59	0.99986	45.55	67.78
59.1	0.99986	45.55	67.78
59.2	0.99986	45.55	67.78
59.3	0.99986	45.55	67.78
59.4	0.99986	45.55	67.78
59.5	0.99986	45.55	67.78
59.6	0.99986	45.55	67.78
59.7	0.99986	45.55	67.78
59.8	0.99986	45.55	67.78
59.9	0.99986	45.55	67.78
6	0.99986	45.55	67.78
60.1	0.99986	45.55	67.78
60.2	0.99986	45.55	67.78
60.3	0.99986	45.55	67.78
60.4	0.99986	45.55	67.78
60.5	0.99986	45.55	67.78
60.6	0.99986	45.55	67.78
60.7	0.99986	45.55	67.78

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
60.8	0.99986	45.55	67.78
60.9	0.99987	45.55	67.78
61	0.99987	45.55	67.78
61.1	0.99987	45.55	67.78
61.2	0.99987	45.55	67.78
61.3	0.99987	45.55	67.78
61.4	0.99987	45.55	67.78
61.5	0.99987	45.55	67.78
61.6	0.99987	45.55	67.78
61.7	0.99987	45.55	67.78
61.8	0.99987	45.55	67.78
61.9	0.99987	45.55	67.78
62	0.99987	45.55	67.78
62.1	0.99987	45.55	67.78
62.2	0.99987	45.55	67.78
62.3	0.99987	45.55	67.78
62.4	0.99987	45.55	67.78
62.5	0.99987	45.55	67.78
62.6	0.99987	45.55	67.78
62.7	0.99987	45.55	67.78
62.8	0.99987	45.56	67.78
62.9	0.99987	45.56	67.78
63	0.99987	45.56	67.78
63.1	0.99987	45.56	67.78
63.2	0.99987	45.56	67.78
63.3	0.99988	45.56	67.78
63.4	0.99988	45.56	67.78
63.5	0.99988	45.56	67.78
63.6	0.99988	45.56	67.78
63.7	0.99988	45.56	67.78
63.8	0.99988	45.56	67.78
63.9	0.99988	45.56	67.78
64	0.99988	45.56	67.78

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
64.1	0.99988	45.56	67.78
64.2	0.99988	45.56	67.78
64.3	0.99988	45.56	67.78
64.4	0.99988	45.56	67.78
64.5	0.99988	45.56	67.78
64.6	0.99988	45.56	67.78
64.7	0.99988	45.56	67.78
64.8	0.99988	45.56	67.78
64.9	0.99988	45.56	67.78
65	0.99988	45.56	67.78
65.1	0.99988	45.56	67.78
65.2	0.99988	45.56	67.78
65.3	0.99988	45.56	67.78
65.4	0.99988	45.56	67.78
65.5	0.99988	45.56	67.78
65.6	0.99988	45.56	67.78
65.7	0.99988	45.56	67.78
65.8	0.99988	45.56	67.78
65.9	0.99988	45.56	67.78
66	0.99989	45.56	67.78
66.1	0.99989	45.56	67.78
66.2	0.99989	45.56	67.78
66.3	0.99989	45.56	67.78
66.4	0.99989	45.56	67.78
66.5	0.99989	45.56	67.78
66.6	0.99989	45.56	67.78
66.7	0.99989	45.56	67.78
66.8	0.99989	45.56	67.78
66.9	0.99989	45.56	67.78
67	0.99989	45.56	67.78
67.1	0.99989	45.56	67.78
67.2	0.99989	45.56	67.78
67.3	0.99989	45.56	67.78

Table 8.3: Deflection points for k=1.4 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
67.4	0.99989	45.56	67.78
67.5	0.99989	45.56	67.78
67.6	0.99989	45.56	67.78
67.7	0.99989	45.56	67.78
67.8	0.99989	45.56	67.78
67.9	0.99989	45.56	67.78
68	0.99989	45.56	67.78
68.1	0.99989	45.56	67.78
68.2	0.99989	45.56	67.78
68.3	0.99989	45.56	67.78
68.4	0.99989	45.56	67.78
68.5	0.99989	45.56	67.78
68.6	0.99989	45.56	67.78
68.7	0.99989	45.56	67.78
68.8	0.99989	45.56	67.78
68.9	0.99989	45.56	67.78
69	0.9999	45.56	67.78
69.1	0.9999	45.56	67.79
69.2	0.9999	45.56	67.79
69.3	0.9999	45.56	67.79
69.4	0.9999	45.56	67.79
69.5	0.9999	45.56	67.79
69.6	0.9999	45.56	67.79
69.7	0.9999	45.56	67.79
69.8	0.9999	45.56	67.79
69.9	0.9999	45.56	67.79
7	0.9999	45.56	67.79

8.1.4 Deflection Point for k=1.67

Table 8.4: Deflection points for k=1.67

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
1.	1.		90
1.01	0.99672	0.046296	85.36
1.02	0.99354	0.12975	83.48
1.03	0.99046	0.23618	82.08
1.04	0.98748	0.36028	80.92
1.05	0.98459	0.49888	79.92
1.06	0.98179	0.64977	79.03
1.07	0.97909	0.81127	78.24
1.08	0.97648	0.98205	77.52
1.09	0.97396	1.161	76.85
1.1	0.97152	1.347	76.24
1.11	0.96916	1.54	75.67
1.12	0.96689	1.738	75.14
1.13	0.96469	1.942	74.64
1.14	0.96258	2.15	74.16
1.15	0.96054	2.363	73.72
1.16	0.95857	2.579	73.3
1.17	0.95668	2.798	72.9
1.18	0.95486	3.021	72.52
1.19	0.9531	3.245	72.16
1.2	0.95142	3.473	71.82
1.21	0.94979	3.702	71.49
1.22	0.94824	3.932	71.18
1.23	0.94674	4.165	70.88
1.24	0.9453	4.398	70.6
1.25	0.94393	4.633	70.32
1.26	0.94261	4.868	70.06
1.27	0.94134	5.104	69.81
1.28	0.94013	5.34	69.57
1.29	0.93898	5.577	69.33
1.3	0.93787	5.814	69.11
1.31	0.93681	6.05	68.9
1.32	0.9358	6.287	68.69

Table 8.4: Deflection points for k=1.67 (continue)

M_x	M_y	δ_{max}	θ_{max}
1.33	0.93484	6.523	68.49
1.34	0.93392	6.76	68.3
1.35	0.93305	6.995	68.11
1.36	0.93222	7.23	67.94
1.37	0.93144	7.464	67.77
1.38	0.93069	7.698	67.6
1.39	0.92998	7.931	67.44
1.4	0.92931	8.162	67.29
1.41	0.92868	8.393	67.14
1.42	0.92808	8.623	66.99
1.43	0.92752	8.852	66.85
1.44	0.92699	9.079	66.72
1.45	0.92649	9.305	66.59
1.46	0.92602	9.53	66.46
1.47	0.92559	9.754	66.34
1.48	0.92518	9.976	66.22
1.49	0.9248	10.2	66.11
1.5	0.92445	10.42	66
1.51	0.92413	10.63	65.89
1.52	0.92383	10.85	65.79
1.53	0.92356	11.07	65.69
1.54	0.92331	11.28	65.59
1.55	0.92309	11.49	65.5
1.56	0.92289	11.7	65.41
1.57	0.92271	11.91	65.32
1.58	0.92255	12.12	65.24
1.59	0.92241	12.32	65.15
1.6	0.92229	12.52	65.07
1.61	0.92219	12.73	65
1.62	0.9221	12.93	64.92
1.63	0.92204	13.13	64.85
1.64	0.92199	13.32	64.78
1.65	0.92196	13.52	64.71

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
1.66	0.92194	13.71	64.64
1.67	0.92194	13.9	64.58
1.68	0.92195	14.09	64.52
1.69	0.92198	14.28	64.46
1.7	0.92202	14.47	64.4
1.71	0.92208	14.65	64.34
1.72	0.92214	14.84	64.29
1.73	0.92222	15.02	64.23
1.74	0.92231	15.2	64.18
1.75	0.92241	15.38	64.13
1.76	0.92252	15.55	64.08
1.77	0.92265	15.73	64.03
1.78	0.92278	15.9	63.99
1.79	0.92292	16.07	63.94
1.8	0.92307	16.24	63.9
1.81	0.92323	16.41	63.86
1.82	0.9234	16.58	63.82
1.83	0.92357	16.74	63.78
1.84	0.92376	16.9	63.74
1.85	0.92395	17.07	63.7
1.86	0.92414	17.23	63.67
1.87	0.92435	17.38	63.63
1.88	0.92456	17.54	63.6
1.89	0.92478	17.7	63.56
1.9	0.925	17.85	63.53
1.91	0.92523	18	63.5
1.92	0.92546	18.15	63.47
1.93	0.9257	18.3	63.44
1.94	0.92594	18.45	63.41
1.95	0.92619	18.6	63.38
1.96	0.92644	18.74	63.36
1.97	0.9267	18.89	63.33
1.98	0.92696	19.03	63.31

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
1.99	0.92722	19.17	63.28
2	0.92749	19.31	63.26
2.02	0.92803	19.58	63.21
2.04	0.92859	19.85	63.17
2.06	0.92915	20.11	63.13
2.08	0.92973	20.37	63.09
2.1	0.93031	20.62	63.06
2.12	0.9309	20.87	63.02
2.14	0.93149	21.11	62.99
2.16	0.93209	21.35	62.96
2.18	0.93269	21.58	62.93
2.2	0.9333	21.81	62.91
2.22	0.93391	22.03	62.88
2.24	0.93452	22.25	62.86
2.26	0.93513	22.47	62.84
2.28	0.93574	22.68	62.82
2.3	0.93635	22.89	62.8
2.32	0.93696	23.09	62.78
2.34	0.93757	23.29	62.77
2.36	0.93818	23.48	62.75
2.38	0.93878	23.67	62.74
2.4	0.93938	23.86	62.73
2.42	0.93998	24.04	62.71
2.44	0.94058	24.22	62.7
2.46	0.94117	24.4	62.69
2.48	0.94176	24.57	62.68
2.5	0.94235	24.74	62.67
2.52	0.94293	24.9	62.67
2.54	0.94351	25.07	62.66
2.56	0.94408	25.23	62.65
2.58	0.94465	25.38	62.64
2.6	0.94521	25.54	62.64
2.62	0.94577	25.69	62.63

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
2.64	0.94632	25.83	62.63
2.66	0.94687	25.98	62.63
2.68	0.94741	26.12	62.62
2.7	0.94795	26.26	62.62
2.72	0.94848	26.4	62.62
2.74	0.94901	26.53	62.61
2.76	0.94953	26.67	62.61
2.78	0.95004	26.8	62.61
2.8	0.95055	26.92	62.61
2.82	0.95106	27.05	62.61
2.84	0.95156	27.17	62.61
2.86	0.95205	27.29	62.61
2.88	0.95254	27.41	62.61
2.9	0.95302	27.53	62.61
2.92	0.9535	27.64	62.61
2.94	0.95397	27.75	62.61
2.96	0.95444	27.86	62.61
2.98	0.9549	27.97	62.61
3	0.95535	28.08	62.61
3.02	0.9558	28.18	62.61
3.04	0.95625	28.29	62.61
3.06	0.95669	28.39	62.62
3.08	0.95712	28.49	62.62
3.1	0.95755	28.59	62.62
3.12	0.95797	28.68	62.62
3.14	0.95839	28.78	62.62
3.16	0.9588	28.87	62.63
3.18	0.95921	28.96	62.63
3.2	0.95962	29.05	62.63
3.22	0.96001	29.14	62.63
3.24	0.96041	29.23	62.64
3.26	0.96079	29.31	62.64
3.28	0.96118	29.39	62.64

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
3.3	0.96156	29.48	62.65
3.32	0.96193	29.56	62.65
3.34	0.9623	29.64	62.65
3.36	0.96266	29.72	62.66
3.38	0.96302	29.79	62.66
3.4	0.96338	29.87	62.66
3.42	0.96373	29.95	62.67
3.44	0.96408	30.02	62.67
3.46	0.96442	30.09	62.67
3.48	0.96476	30.16	62.68
3.5	0.96509	30.23	62.68
3.52	0.96542	30.3	62.68
3.54	0.96575	30.37	62.69
3.56	0.96607	30.44	62.69
3.58	0.96639	30.51	62.7
3.6	0.9667	30.57	62.7
3.62	0.96701	30.64	62.7
3.64	0.96731	30.7	62.71
3.66	0.96762	30.76	62.71
3.68	0.96791	30.82	62.71
3.7	0.96821	30.88	62.72
3.72	0.9685	30.94	62.72
3.74	0.96879	31	62.73
3.76	0.96907	31.06	62.73
3.78	0.96935	31.12	62.73
3.8	0.96963	31.17	62.74
3.82	0.9699	31.23	62.74
3.84	0.97017	31.28	62.74
3.86	0.97044	31.34	62.75
3.88	0.9707	31.39	62.75
3.9	0.97096	31.44	62.76
3.92	0.97122	31.49	62.76
3.94	0.97147	31.54	62.76

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
3.96	0.97172	31.59	62.77
3.98	0.97197	31.64	62.77
4	0.97221	31.69	62.77
4.02	0.97246	31.74	62.78
4.04	0.97269	31.79	62.78
4.06	0.97293	31.83	62.79
4.08	0.97316	31.88	62.79
4.1	0.97339	31.93	62.79
4.12	0.97362	31.97	62.8
4.14	0.97385	32.01	62.8
4.16	0.97407	32.06	62.8
4.18	0.97429	32.1	62.81
4.2	0.9745	32.14	62.81
4.22	0.97472	32.19	62.81
4.24	0.97493	32.23	62.82
4.26	0.97514	32.27	62.82
4.28	0.97535	32.31	62.83
4.3	0.97555	32.35	62.83
4.32	0.97575	32.39	62.83
4.34	0.97595	32.43	62.84
4.36	0.97615	32.46	62.84
4.38	0.97635	32.5	62.84
4.4	0.97654	32.54	62.85
4.42	0.97673	32.58	62.85
4.44	0.97692	32.61	62.85
4.46	0.9771	32.65	62.86
4.48	0.97729	32.68	62.86
4.5	0.97747	32.72	62.86
4.52	0.97765	32.75	62.87
4.54	0.97783	32.79	62.87
4.56	0.978	32.82	62.87
4.58	0.97818	32.85	62.88
4.6	0.97835	32.89	62.88

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
4.62	0.97852	32.92	62.88
4.64	0.97869	32.95	62.89
4.66	0.97885	32.98	62.89
4.68	0.97902	33.01	62.89
4.7	0.97918	33.04	62.89
4.72	0.97934	33.08	62.9
4.74	0.9795	33.11	62.9
4.76	0.97966	33.13	62.9
4.78	0.97981	33.16	62.91
4.8	0.97997	33.19	62.91
4.82	0.98012	33.22	62.91
4.84	0.98027	33.25	62.92
4.86	0.98042	33.28	62.92
4.88	0.98057	33.31	62.92
4.9	0.98071	33.33	62.92
4.92	0.98086	33.36	62.93
4.94	0.981	33.39	62.93
4.96	0.98114	33.41	62.93
4.98	0.98128	33.44	62.94
5	0.98142	33.47	62.94
5.04	0.98169	33.52	62.94
5.08	0.98195	33.57	62.95
5.12	0.98221	33.61	62.96
5.16	0.98247	33.66	62.96
5.2	0.98272	33.71	62.97
5.24	0.98296	33.75	62.97
5.28	0.9832	33.8	62.98
5.32	0.98344	33.84	62.98
5.36	0.98367	33.88	62.99
5.4	0.98389	33.93	62.99
5.44	0.98411	33.97	63
5.48	0.98433	34.01	63
5.52	0.98454	34.05	63

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
5.56	0.98475	34.08	63.01
5.6	0.98496	34.12	63.01
5.64	0.98516	34.16	63.02
5.68	0.98535	34.19	63.02
5.72	0.98554	34.23	63.03
5.76	0.98573	34.26	63.03
5.8	0.98592	34.3	63.03
5.84	0.9861	34.33	63.04
5.88	0.98628	34.36	63.04
5.92	0.98645	34.4	63.05
5.96	0.98662	34.43	63.05
6	0.98679	34.46	63.05
6.04	0.98696	34.49	63.06
6.08	0.98712	34.52	63.06
6.12	0.98728	34.55	63.07
6.16	0.98744	34.57	63.07
6.2	0.98759	34.6	63.07
6.24	0.98774	34.63	63.08
6.28	0.98789	34.66	63.08
6.32	0.98804	34.68	63.08
6.36	0.98818	34.71	63.09
6.4	0.98832	34.73	63.09
6.44	0.98846	34.76	63.09
6.48	0.98859	34.78	63.1
6.52	0.98873	34.81	63.1
6.56	0.98886	34.83	63.1
6.6	0.98899	34.85	63.11
6.64	0.98911	34.88	63.11
6.68	0.98924	34.9	63.11
6.72	0.98936	34.92	63.11
6.76	0.98948	34.94	63.12
6.8	0.9896	34.96	63.12
6.84	0.98972	34.98	63.12

Table 8.4: Deflection points for k=1.67 (continue)

M_x	M_y	δ_{max}	θ_{max}
6.88	0.98983	35	63.13
6.92	0.98994	35.02	63.13
6.96	0.99005	35.04	63.13
7	0.99016	35.06	63.13
7.04	0.99027	35.08	63.14
7.08	0.99038	35.1	63.14
7.12	0.99048	35.12	63.14
7.16	0.99058	35.14	63.14
7.2	0.99068	35.16	63.15
7.24	0.99078	35.17	63.15
7.28	0.99088	35.19	63.15
7.32	0.99098	35.21	63.15
7.36	0.99107	35.23	63.16
7.4	0.99116	35.24	63.16
7.44	0.99125	35.26	63.16
7.48	0.99135	35.27	63.16
7.52	0.99143	35.29	63.16
7.56	0.99152	35.31	63.17
7.6	0.99161	35.32	63.17
7.64	0.99169	35.34	63.17
7.68	0.99178	35.35	63.17
7.72	0.99186	35.37	63.18
7.76	0.99194	35.38	63.18
7.8	0.99202	35.39	63.18
7.84	0.9921	35.41	63.18
7.88	0.99218	35.42	63.18
7.92	0.99225	35.44	63.19
7.96	0.99233	35.45	63.19
8	0.9924	35.46	63.19
8.04	0.99248	35.48	63.19
8.08	0.99255	35.49	63.19
8.12	0.99262	35.5	63.19
8.16	0.99269	35.51	63.2

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
8.2	0.99276	35.53	63.2
8.24	0.99283	35.54	63.2
8.28	0.99289	35.55	63.2
8.32	0.99296	35.56	63.2
8.36	0.99303	35.57	63.2
8.4	0.99309	35.58	63.21
8.44	0.99315	35.59	63.21
8.48	0.99322	35.61	63.21
8.52	0.99328	35.62	63.21
8.56	0.99334	35.63	63.21
8.6	0.9934	35.64	63.21
8.64	0.99346	35.65	63.22
8.68	0.99352	35.66	63.22
8.72	0.99358	35.67	63.22
8.76	0.99363	35.68	63.22
8.8	0.99369	35.69	63.22
8.84	0.99375	35.7	63.22
8.88	0.9938	35.71	63.22
8.92	0.99385	35.72	63.23
8.96	0.99391	35.73	63.23
9	0.99396	35.74	63.23
9.04	0.99401	35.75	63.23
9.08	0.99406	35.76	63.23
9.12	0.99412	35.76	63.23
9.16	0.99417	35.77	63.23
9.2	0.99422	35.78	63.24
9.24	0.99426	35.79	63.24
9.28	0.99431	35.8	63.24
9.32	0.99436	35.81	63.24
9.36	0.99441	35.82	63.24
9.4	0.99445	35.82	63.24
9.44	0.9945	35.83	63.24
9.48	0.99455	35.84	63.24

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
9.52	0.99459	35.85	63.24
9.56	0.99463	35.85	63.25
9.6	0.99468	35.86	63.25
9.64	0.99472	35.87	63.25
9.68	0.99476	35.88	63.25
9.72	0.99481	35.89	63.25
9.76	0.99485	35.89	63.25
9.8	0.99489	35.9	63.25
9.84	0.99493	35.91	63.25
9.88	0.99497	35.91	63.25
9.92	0.99501	35.92	63.26
9.96	0.99505	35.93	63.26
1	0.99509	35.93	63.26
10.1	0.99518	35.95	63.26
10.2	0.99528	35.97	63.26
10.3	0.99537	35.98	63.27
10.4	0.99545	36	63.27
10.5	0.99554	36.01	63.27
10.6	0.99562	36.03	63.27
10.7	0.9957	36.04	63.27
10.8	0.99578	36.05	63.28
10.9	0.99585	36.07	63.28
11	0.99593	36.08	63.28
11.1	0.996	36.09	63.28
11.2	0.99607	36.11	63.28
11.3	0.99614	36.12	63.29
11.4	0.9962	36.13	63.29
11.5	0.99627	36.14	63.29
11.6	0.99633	36.15	63.29
11.7	0.99639	36.16	63.29
11.8	0.99645	36.17	63.29
11.9	0.99651	36.18	63.3
12	0.99657	36.19	63.3

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
12.1	0.99663	36.2	63.3
12.2	0.99668	36.21	63.3
12.3	0.99673	36.22	63.3
12.4	0.99679	36.23	63.3
12.5	0.99684	36.24	63.3
12.6	0.99689	36.25	63.31
12.7	0.99693	36.26	63.31
12.8	0.99698	36.26	63.31
12.9	0.99703	36.27	63.31
13	0.99707	36.28	63.31
13.1	0.99712	36.29	63.31
13.2	0.99716	36.29	63.31
13.3	0.9972	36.3	63.31
13.4	0.99724	36.31	63.32
13.5	0.99728	36.32	63.32
13.6	0.99732	36.32	63.32
13.7	0.99736	36.33	63.32
13.8	0.9974	36.34	63.32
13.9	0.99744	36.34	63.32
14	0.99747	36.35	63.32
14.1	0.99751	36.35	63.32
14.2	0.99754	36.36	63.32
14.3	0.99758	36.37	63.32
14.4	0.99761	36.37	63.33
14.5	0.99764	36.38	63.33
14.6	0.99767	36.38	63.33
14.7	0.9977	36.39	63.33
14.8	0.99774	36.39	63.33
14.9	0.99777	36.4	63.33
15	0.9978	36.4	63.33
15.1	0.99782	36.41	63.33
15.2	0.99785	36.41	63.33
15.3	0.99788	36.42	63.33

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
15.4	0.99791	36.42	63.33
15.5	0.99793	36.43	63.33
15.6	0.99796	36.43	63.34
15.7	0.99799	36.44	63.34
15.8	0.99801	36.44	63.34
15.9	0.99804	36.45	63.34
16	0.99806	36.45	63.34
16.1	0.99808	36.45	63.34
16.2	0.99811	36.46	63.34
16.3	0.99813	36.46	63.34
16.4	0.99815	36.47	63.34
16.5	0.99818	36.47	63.34
16.6	0.9982	36.47	63.34
16.7	0.99822	36.48	63.34
16.8	0.99824	36.48	63.34
16.9	0.99826	36.49	63.34
17	0.99828	36.49	63.34
17.1	0.9983	36.49	63.34
17.2	0.99832	36.5	63.35
17.3	0.99834	36.5	63.35
17.4	0.99836	36.5	63.35
17.5	0.99838	36.51	63.35
17.6	0.99839	36.51	63.35
17.7	0.99841	36.51	63.35
17.8	0.99843	36.51	63.35
17.9	0.99845	36.52	63.35
18	0.99847	36.52	63.35
18.1	0.99848	36.52	63.35
18.2	0.9985	36.53	63.35
18.3	0.99851	36.53	63.35
18.4	0.99853	36.53	63.35
18.5	0.99855	36.53	63.35
18.6	0.99856	36.54	63.35

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
18.7	0.99858	36.54	63.35
18.8	0.99859	36.54	63.35
18.9	0.99861	36.54	63.35
19	0.99862	36.55	63.35
19.1	0.99864	36.55	63.35
19.2	0.99865	36.55	63.35
19.3	0.99866	36.55	63.35
19.4	0.99868	36.56	63.36
19.5	0.99869	36.56	63.36
19.6	0.9987	36.56	63.36
19.7	0.99872	36.56	63.36
19.8	0.99873	36.57	63.36
19.9	0.99874	36.57	63.36
2	0.99876	36.57	63.36
20.1	0.99877	36.57	63.36
20.2	0.99878	36.57	63.36
20.3	0.99879	36.58	63.36
20.4	0.9988	36.58	63.36
20.5	0.99882	36.58	63.36
20.6	0.99883	36.58	63.36
20.7	0.99884	36.58	63.36
20.8	0.99885	36.59	63.36
20.9	0.99886	36.59	63.36
21	0.99887	36.59	63.36
21.1	0.99888	36.59	63.36
21.2	0.99889	36.59	63.36
21.3	0.9989	36.6	63.36
21.4	0.99891	36.6	63.36
21.5	0.99892	36.6	63.36
21.6	0.99893	36.6	63.36
21.7	0.99894	36.6	63.36
21.8	0.99895	36.6	63.36
21.9	0.99896	36.61	63.36

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
22	0.99897	36.61	63.36
22.1	0.99898	36.61	63.36
22.2	0.99899	36.61	63.36
22.3	0.999	36.61	63.36
22.4	0.99901	36.61	63.36
22.5	0.99902	36.62	63.36
22.6	0.99902	36.62	63.36
22.7	0.99903	36.62	63.36
22.8	0.99904	36.62	63.37
22.9	0.99905	36.62	63.37
23	0.99906	36.62	63.37
23.1	0.99907	36.62	63.37
23.2	0.99907	36.63	63.37
23.3	0.99908	36.63	63.37
23.4	0.99909	36.63	63.37
23.5	0.9991	36.63	63.37
23.6	0.99911	36.63	63.37
23.7	0.99911	36.63	63.37
23.8	0.99912	36.63	63.37
23.9	0.99913	36.63	63.37
24	0.99913	36.64	63.37
24.1	0.99914	36.64	63.37
24.2	0.99915	36.64	63.37
24.3	0.99916	36.64	63.37
24.4	0.99916	36.64	63.37
24.5	0.99917	36.64	63.37
24.6	0.99918	36.64	63.37
24.7	0.99918	36.64	63.37
24.8	0.99919	36.65	63.37
24.9	0.9992	36.65	63.37
25	0.9992	36.65	63.37
25.1	0.99921	36.65	63.37
25.2	0.99921	36.65	63.37

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
25.3	0.99922	36.65	63.37
25.4	0.99923	36.65	63.37
25.5	0.99923	36.65	63.37
25.6	0.99924	36.65	63.37
25.7	0.99924	36.65	63.37
25.8	0.99925	36.66	63.37
25.9	0.99926	36.66	63.37
26	0.99926	36.66	63.37
26.1	0.99927	36.66	63.37
26.2	0.99927	36.66	63.37
26.3	0.99928	36.66	63.37
26.4	0.99928	36.66	63.37
26.5	0.99929	36.66	63.37
26.6	0.9993	36.66	63.37
26.7	0.9993	36.66	63.37
26.8	0.99931	36.67	63.37
26.9	0.99931	36.67	63.37
27	0.99932	36.67	63.37
27.1	0.99932	36.67	63.37
27.2	0.99933	36.67	63.37
27.3	0.99933	36.67	63.37
27.4	0.99934	36.67	63.37
27.5	0.99934	36.67	63.37
27.6	0.99935	36.67	63.37
27.7	0.99935	36.67	63.37
27.8	0.99935	36.67	63.37
27.9	0.99936	36.67	63.37
28	0.99936	36.68	63.37
28.1	0.99937	36.68	63.37
28.2	0.99937	36.68	63.37
28.3	0.99938	36.68	63.37
28.4	0.99938	36.68	63.37
28.5	0.99939	36.68	63.37

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
28.6	0.99939	36.68	63.37
28.7	0.99939	36.68	63.38
28.8	0.9994	36.68	63.38
28.9	0.9994	36.68	63.38
29	0.99941	36.68	63.38
29.1	0.99941	36.68	63.38
29.2	0.99941	36.68	63.38
29.3	0.99942	36.68	63.38
29.4	0.99942	36.69	63.38
29.5	0.99943	36.69	63.38
29.6	0.99943	36.69	63.38
29.7	0.99943	36.69	63.38
29.8	0.99944	36.69	63.38
29.9	0.99944	36.69	63.38
3	0.99945	36.69	63.38
30.1	0.99945	36.69	63.38
30.2	0.99945	36.69	63.38
30.3	0.99946	36.69	63.38
30.4	0.99946	36.69	63.38
30.5	0.99946	36.69	63.38
30.6	0.99947	36.69	63.38
30.7	0.99947	36.69	63.38
30.8	0.99947	36.69	63.38
30.9	0.99948	36.69	63.38
31	0.99948	36.7	63.38
31.1	0.99948	36.7	63.38
31.2	0.99949	36.7	63.38
31.3	0.99949	36.7	63.38
31.4	0.99949	36.7	63.38
31.5	0.9995	36.7	63.38
31.6	0.9995	36.7	63.38
31.7	0.9995	36.7	63.38
31.8	0.99951	36.7	63.38

Table 8.4: Deflection points for k=1.67 (continue)

M_x	M_y	δ_{max}	θ_{max}
31.9	0.99951	36.7	63.38
32	0.99951	36.7	63.38
32.1	0.99952	36.7	63.38
32.2	0.99952	36.7	63.38
32.3	0.99952	36.7	63.38
32.4	0.99952	36.7	63.38
32.5	0.99953	36.7	63.38
32.6	0.99953	36.7	63.38
32.7	0.99953	36.7	63.38
32.8	0.99954	36.7	63.38
32.9	0.99954	36.71	63.38
33	0.99954	36.71	63.38
33.1	0.99954	36.71	63.38
33.2	0.99955	36.71	63.38
33.3	0.99955	36.71	63.38
33.4	0.99955	36.71	63.38
33.5	0.99956	36.71	63.38
33.6	0.99956	36.71	63.38
33.7	0.99956	36.71	63.38
33.8	0.99956	36.71	63.38
33.9	0.99957	36.71	63.38
34	0.99957	36.71	63.38
34.1	0.99957	36.71	63.38
34.2	0.99957	36.71	63.38
34.3	0.99958	36.71	63.38
34.4	0.99958	36.71	63.38
34.5	0.99958	36.71	63.38
34.6	0.99958	36.71	63.38
34.7	0.99959	36.71	63.38
34.8	0.99959	36.71	63.38
34.9	0.99959	36.71	63.38
35	0.99959	36.71	63.38
35.1	0.99959	36.71	63.38

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
35.2	0.9996	36.72	63.38
35.3	0.9996	36.72	63.38
35.4	0.9996	36.72	63.38
35.5	0.9996	36.72	63.38
35.6	0.99961	36.72	63.38
35.7	0.99961	36.72	63.38
35.8	0.99961	36.72	63.38
35.9	0.99961	36.72	63.38
36	0.99961	36.72	63.38
36.1	0.99962	36.72	63.38
36.2	0.99962	36.72	63.38
36.3	0.99962	36.72	63.38
36.4	0.99962	36.72	63.38
36.5	0.99963	36.72	63.38
36.6	0.99963	36.72	63.38
36.7	0.99963	36.72	63.38
36.8	0.99963	36.72	63.38
36.9	0.99963	36.72	63.38
37	0.99964	36.72	63.38
37.1	0.99964	36.72	63.38
37.2	0.99964	36.72	63.38
37.3	0.99964	36.72	63.38
37.4	0.99964	36.72	63.38
37.5	0.99964	36.72	63.38
37.6	0.99965	36.72	63.38
37.7	0.99965	36.72	63.38
37.8	0.99965	36.72	63.38
37.9	0.99965	36.72	63.38
38	0.99965	36.72	63.38
38.1	0.99966	36.73	63.38
38.2	0.99966	36.73	63.38
38.3	0.99966	36.73	63.38
38.4	0.99966	36.73	63.38

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
38.5	0.99966	36.73	63.38
38.6	0.99966	36.73	63.38
38.7	0.99967	36.73	63.38
38.8	0.99967	36.73	63.38
38.9	0.99967	36.73	63.38
39	0.99967	36.73	63.38
39.1	0.99967	36.73	63.38
39.2	0.99967	36.73	63.38
39.3	0.99968	36.73	63.38
39.4	0.99968	36.73	63.38
39.5	0.99968	36.73	63.38
39.6	0.99968	36.73	63.38
39.7	0.99968	36.73	63.38
39.8	0.99968	36.73	63.38
39.9	0.99969	36.73	63.38
4	0.99969	36.73	63.38
40.1	0.99969	36.73	63.38
40.2	0.99969	36.73	63.38
40.3	0.99969	36.73	63.38
40.4	0.99969	36.73	63.38
40.5	0.9997	36.73	63.38
40.6	0.9997	36.73	63.38
40.7	0.9997	36.73	63.38
40.8	0.9997	36.73	63.38
40.9	0.9997	36.73	63.38
41	0.9997	36.73	63.38
41.1	0.9997	36.73	63.38
41.2	0.99971	36.73	63.38
41.3	0.99971	36.73	63.38
41.4	0.99971	36.73	63.38
41.5	0.99971	36.73	63.38
41.6	0.99971	36.73	63.38
41.7	0.99971	36.73	63.38

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
41.8	0.99971	36.74	63.38
41.9	0.99972	36.74	63.38
42	0.99972	36.74	63.38
42.1	0.99972	36.74	63.38
42.2	0.99972	36.74	63.38
42.3	0.99972	36.74	63.38
42.4	0.99972	36.74	63.38
42.5	0.99972	36.74	63.38
42.6	0.99972	36.74	63.38
42.7	0.99973	36.74	63.38
42.8	0.99973	36.74	63.38
42.9	0.99973	36.74	63.38
43	0.99973	36.74	63.38
43.1	0.99973	36.74	63.38
43.2	0.99973	36.74	63.38
43.3	0.99973	36.74	63.38
43.4	0.99973	36.74	63.38
43.5	0.99974	36.74	63.38
43.6	0.99974	36.74	63.38
43.7	0.99974	36.74	63.38
43.8	0.99974	36.74	63.38
43.9	0.99974	36.74	63.38
44	0.99974	36.74	63.38
44.1	0.99974	36.74	63.38
44.2	0.99974	36.74	63.38
44.3	0.99975	36.74	63.38
44.4	0.99975	36.74	63.38
44.5	0.99975	36.74	63.38
44.6	0.99975	36.74	63.38
44.7	0.99975	36.74	63.39
44.8	0.99975	36.74	63.39
44.9	0.99975	36.74	63.39
45	0.99975	36.74	63.39

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
45.1	0.99975	36.74	63.39
45.2	0.99976	36.74	63.39
45.3	0.99976	36.74	63.39
45.4	0.99976	36.74	63.39
45.5	0.99976	36.74	63.39
45.6	0.99976	36.74	63.39
45.7	0.99976	36.74	63.39
45.8	0.99976	36.74	63.39
45.9	0.99976	36.74	63.39
46	0.99976	36.74	63.39
46.1	0.99976	36.74	63.39
46.2	0.99977	36.74	63.39
46.3	0.99977	36.74	63.39
46.4	0.99977	36.74	63.39
46.5	0.99977	36.74	63.39
46.6	0.99977	36.74	63.39
46.7	0.99977	36.74	63.39
46.8	0.99977	36.75	63.39
46.9	0.99977	36.75	63.39
47	0.99977	36.75	63.39
47.1	0.99977	36.75	63.39
47.2	0.99978	36.75	63.39
47.3	0.99978	36.75	63.39
47.4	0.99978	36.75	63.39
47.5	0.99978	36.75	63.39
47.6	0.99978	36.75	63.39
47.7	0.99978	36.75	63.39
47.8	0.99978	36.75	63.39
47.9	0.99978	36.75	63.39
48	0.99978	36.75	63.39
48.1	0.99978	36.75	63.39
48.2	0.99978	36.75	63.39
48.3	0.99979	36.75	63.39

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
48.4	0.99979	36.75	63.39
48.5	0.99979	36.75	63.39
48.6	0.99979	36.75	63.39
48.7	0.99979	36.75	63.39
48.8	0.99979	36.75	63.39
48.9	0.99979	36.75	63.39
49	0.99979	36.75	63.39
49.1	0.99979	36.75	63.39
49.2	0.99979	36.75	63.39
49.3	0.99979	36.75	63.39
49.4	0.9998	36.75	63.39
49.5	0.9998	36.75	63.39
49.6	0.9998	36.75	63.39
49.7	0.9998	36.75	63.39
49.8	0.9998	36.75	63.39
49.9	0.9998	36.75	63.39
5	0.9998	36.75	63.39
50.1	0.9998	36.75	63.39
50.2	0.9998	36.75	63.39
50.3	0.9998	36.75	63.39
50.4	0.9998	36.75	63.39
50.5	0.9998	36.75	63.39
50.6	0.9998	36.75	63.39
50.7	0.99981	36.75	63.39
50.8	0.99981	36.75	63.39
50.9	0.99981	36.75	63.39
51	0.99981	36.75	63.39
51.1	0.99981	36.75	63.39
51.2	0.99981	36.75	63.39
51.3	0.99981	36.75	63.39
51.4	0.99981	36.75	63.39
51.5	0.99981	36.75	63.39
51.6	0.99981	36.75	63.39

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
51.7	0.99981	36.75	63.39
51.8	0.99981	36.75	63.39
51.9	0.99981	36.75	63.39
52	0.99982	36.75	63.39
52.1	0.99982	36.75	63.39
52.2	0.99982	36.75	63.39
52.3	0.99982	36.75	63.39
52.4	0.99982	36.75	63.39
52.5	0.99982	36.75	63.39
52.6	0.99982	36.75	63.39
52.7	0.99982	36.75	63.39
52.8	0.99982	36.75	63.39
52.9	0.99982	36.75	63.39
53	0.99982	36.75	63.39
53.1	0.99982	36.75	63.39
53.2	0.99982	36.75	63.39
53.3	0.99982	36.75	63.39
53.4	0.99982	36.75	63.39
53.5	0.99983	36.75	63.39
53.6	0.99983	36.75	63.39
53.7	0.99983	36.75	63.39
53.8	0.99983	36.75	63.39
53.9	0.99983	36.75	63.39
54	0.99983	36.75	63.39
54.1	0.99983	36.75	63.39
54.2	0.99983	36.76	63.39
54.3	0.99983	36.76	63.39
54.4	0.99983	36.76	63.39
54.5	0.99983	36.76	63.39
54.6	0.99983	36.76	63.39
54.7	0.99983	36.76	63.39
54.8	0.99983	36.76	63.39
54.9	0.99983	36.76	63.39

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
55	0.99983	36.76	63.39
55.1	0.99984	36.76	63.39
55.2	0.99984	36.76	63.39
55.3	0.99984	36.76	63.39
55.4	0.99984	36.76	63.39
55.5	0.99984	36.76	63.39
55.6	0.99984	36.76	63.39
55.7	0.99984	36.76	63.39
55.8	0.99984	36.76	63.39
55.9	0.99984	36.76	63.39
56	0.99984	36.76	63.39
56.1	0.99984	36.76	63.39
56.2	0.99984	36.76	63.39
56.3	0.99984	36.76	63.39
56.4	0.99984	36.76	63.39
56.5	0.99984	36.76	63.39
56.6	0.99984	36.76	63.39
56.7	0.99984	36.76	63.39
56.8	0.99985	36.76	63.39
56.9	0.99985	36.76	63.39
57	0.99985	36.76	63.39
57.1	0.99985	36.76	63.39
57.2	0.99985	36.76	63.39
57.3	0.99985	36.76	63.39
57.4	0.99985	36.76	63.39
57.5	0.99985	36.76	63.39
57.6	0.99985	36.76	63.39
57.7	0.99985	36.76	63.39
57.8	0.99985	36.76	63.39
57.9	0.99985	36.76	63.39
58	0.99985	36.76	63.39
58.1	0.99985	36.76	63.39
58.2	0.99985	36.76	63.39

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
58.3	0.99985	36.76	63.39
58.4	0.99985	36.76	63.39
58.5	0.99985	36.76	63.39
58.6	0.99985	36.76	63.39
58.7	0.99985	36.76	63.39
58.8	0.99986	36.76	63.39
58.9	0.99986	36.76	63.39
59	0.99986	36.76	63.39
59.1	0.99986	36.76	63.39
59.2	0.99986	36.76	63.39
59.3	0.99986	36.76	63.39
59.4	0.99986	36.76	63.39
59.5	0.99986	36.76	63.39
59.6	0.99986	36.76	63.39
59.7	0.99986	36.76	63.39
59.8	0.99986	36.76	63.39
59.9	0.99986	36.76	63.39
6	0.99986	36.76	63.39
60.1	0.99986	36.76	63.39
60.2	0.99986	36.76	63.39
60.3	0.99986	36.76	63.39
60.4	0.99986	36.76	63.39
60.5	0.99986	36.76	63.39
60.6	0.99986	36.76	63.39
60.7	0.99986	36.76	63.39
60.8	0.99986	36.76	63.39
60.9	0.99987	36.76	63.39
61	0.99987	36.76	63.39
61.1	0.99987	36.76	63.39
61.2	0.99987	36.76	63.39
61.3	0.99987	36.76	63.39
61.4	0.99987	36.76	63.39
61.5	0.99987	36.76	63.39

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
61.6	0.99987	36.76	63.39
61.7	0.99987	36.76	63.39
61.8	0.99987	36.76	63.39
61.9	0.99987	36.76	63.39
62	0.99987	36.76	63.39
62.1	0.99987	36.76	63.39
62.2	0.99987	36.76	63.39
62.3	0.99987	36.76	63.39
62.4	0.99987	36.76	63.39
62.5	0.99987	36.76	63.39
62.6	0.99987	36.76	63.39
62.7	0.99987	36.76	63.39
62.8	0.99987	36.76	63.39
62.9	0.99987	36.76	63.39
63	0.99987	36.76	63.39
63.1	0.99987	36.76	63.39
63.2	0.99987	36.76	63.39
63.3	0.99988	36.76	63.39
63.4	0.99988	36.76	63.39
63.5	0.99988	36.76	63.39
63.6	0.99988	36.76	63.39
63.7	0.99988	36.76	63.39
63.8	0.99988	36.76	63.39
63.9	0.99988	36.76	63.39
64	0.99988	36.76	63.39
64.1	0.99988	36.76	63.39
64.2	0.99988	36.76	63.39
64.3	0.99988	36.76	63.39
64.4	0.99988	36.76	63.39
64.5	0.99988	36.76	63.39
64.6	0.99988	36.76	63.39
64.7	0.99988	36.76	63.39
64.8	0.99988	36.76	63.39

Table 8.4: Deflection points for k=1.67 (continue)

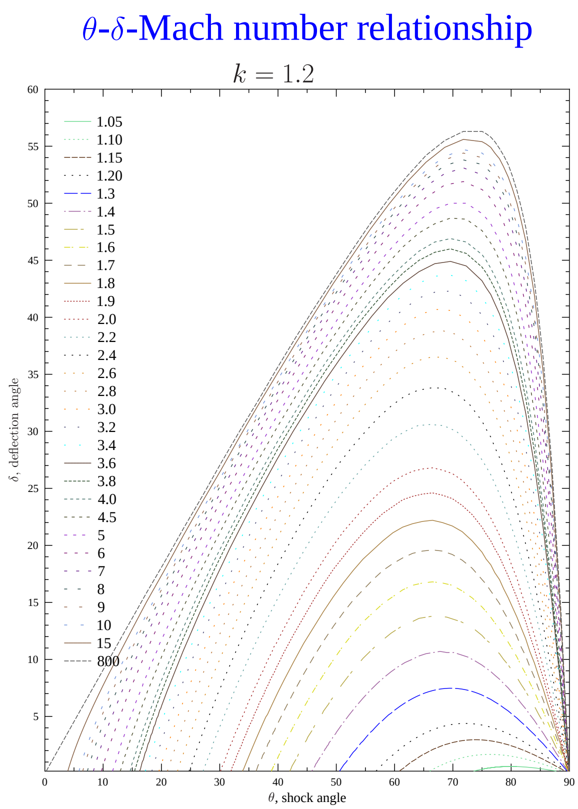
$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
64.9	0.99988	36.76	63.39
65	0.99988	36.76	63.39
65.1	0.99988	36.76	63.39
65.2	0.99988	36.76	63.39
65.3	0.99988	36.76	63.39
65.4	0.99988	36.76	63.39
65.5	0.99988	36.76	63.39
65.6	0.99988	36.76	63.39
65.7	0.99988	36.76	63.39
65.8	0.99988	36.76	63.39
65.9	0.99988	36.76	63.39
66	0.99989	36.76	63.39
66.1	0.99989	36.76	63.39
66.2	0.99989	36.76	63.39
66.3	0.99989	36.76	63.39
66.4	0.99989	36.76	63.39
66.5	0.99989	36.76	63.39
66.6	0.99989	36.76	63.39
66.7	0.99989	36.76	63.39
66.8	0.99989	36.76	63.39
66.9	0.99989	36.77	63.39
67	0.99989	36.77	63.39
67.1	0.99989	36.77	63.39
67.2	0.99989	36.77	63.39
67.3	0.99989	36.77	63.39
67.4	0.99989	36.77	63.39
67.5	0.99989	36.77	63.39
67.6	0.99989	36.77	63.39
67.7	0.99989	36.77	63.39
67.8	0.99989	36.77	63.39
67.9	0.99989	36.77	63.39
68	0.99989	36.77	63.39
68.1	0.99989	36.77	63.39

Table 8.4: Deflection points for k=1.67 (continue)

$\mathbf{M_x}$	$\mathbf{M_y}$	$\delta_{\mathbf{max}}$	$\theta_{\mathbf{max}}$
68.2	0.99989	36.77	63.39
68.3	0.99989	36.77	63.39
68.4	0.99989	36.77	63.39
68.5	0.99989	36.77	63.39
68.6	0.99989	36.77	63.39
68.7	0.99989	36.77	63.39
68.8	0.99989	36.77	63.39
68.9	0.99989	36.77	63.39
69	0.9999	36.77	63.39
69.1	0.9999	36.77	63.39
69.2	0.9999	36.77	63.39
69.3	0.9999	36.77	63.39
69.4	0.9999	36.77	63.39
69.5	0.9999	36.77	63.39
69.6	0.9999	36.77	63.39
69.7	0.9999	36.77	63.39
69.8	0.9999	36.77	63.39
69.9	0.9999	36.77	63.39
7	0.9999	36.77	63.39

8.2 Regular Oblique Shock Figures

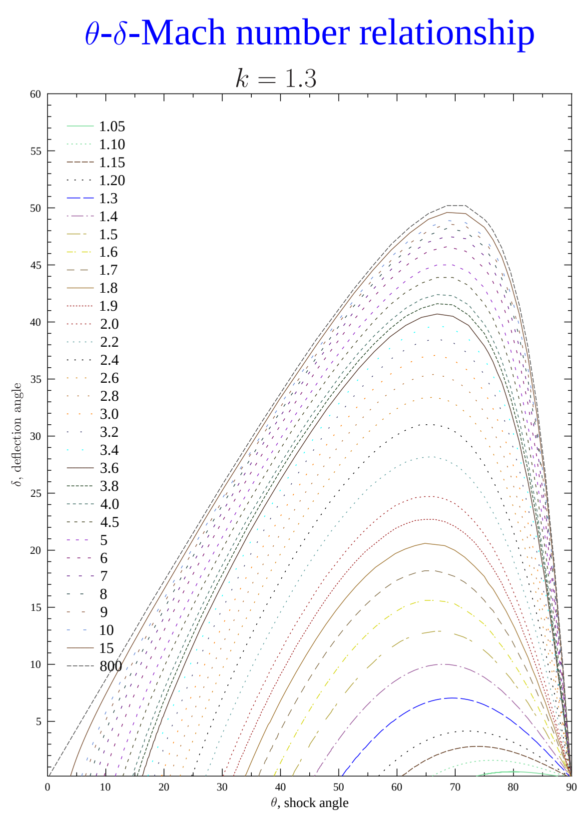
8.2.1 Oblique Shock k=1.2



December 4, 2007

The relationship between the shock wave angle, θ and deflection angle, δ, and Mach number for k=1.2

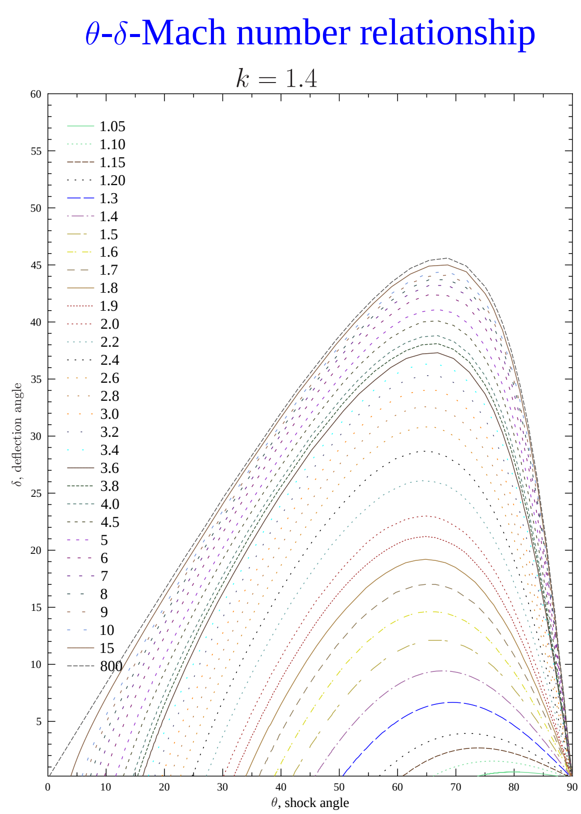
8.2.2 Oblique Shock k=1.3



December 4, 2007

The relationship between the shock wave angle, θ and deflection angle, δ, and Mach number for k=1.3

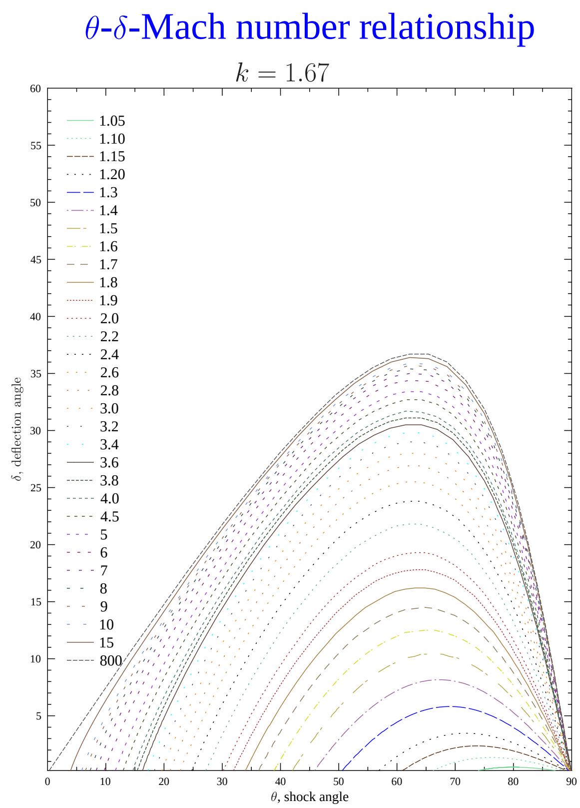
8.2.3 Oblique Shock k=1.4



December 4, 2007

The relationship between the shock wave angle, θ and deflection angle, δ, and Mach number for k=1.4

8.2.4 Oblique Shock k=1.67



December 4, 2007

The relationship between the shock wave angle, θ and deflection angle, δ, and Mach number for k=1.67