

Shelly Cashman: Microsoft Excel 2019

Module 2: Formulas, Functions, and Formatting





Objectives (1 of 2)

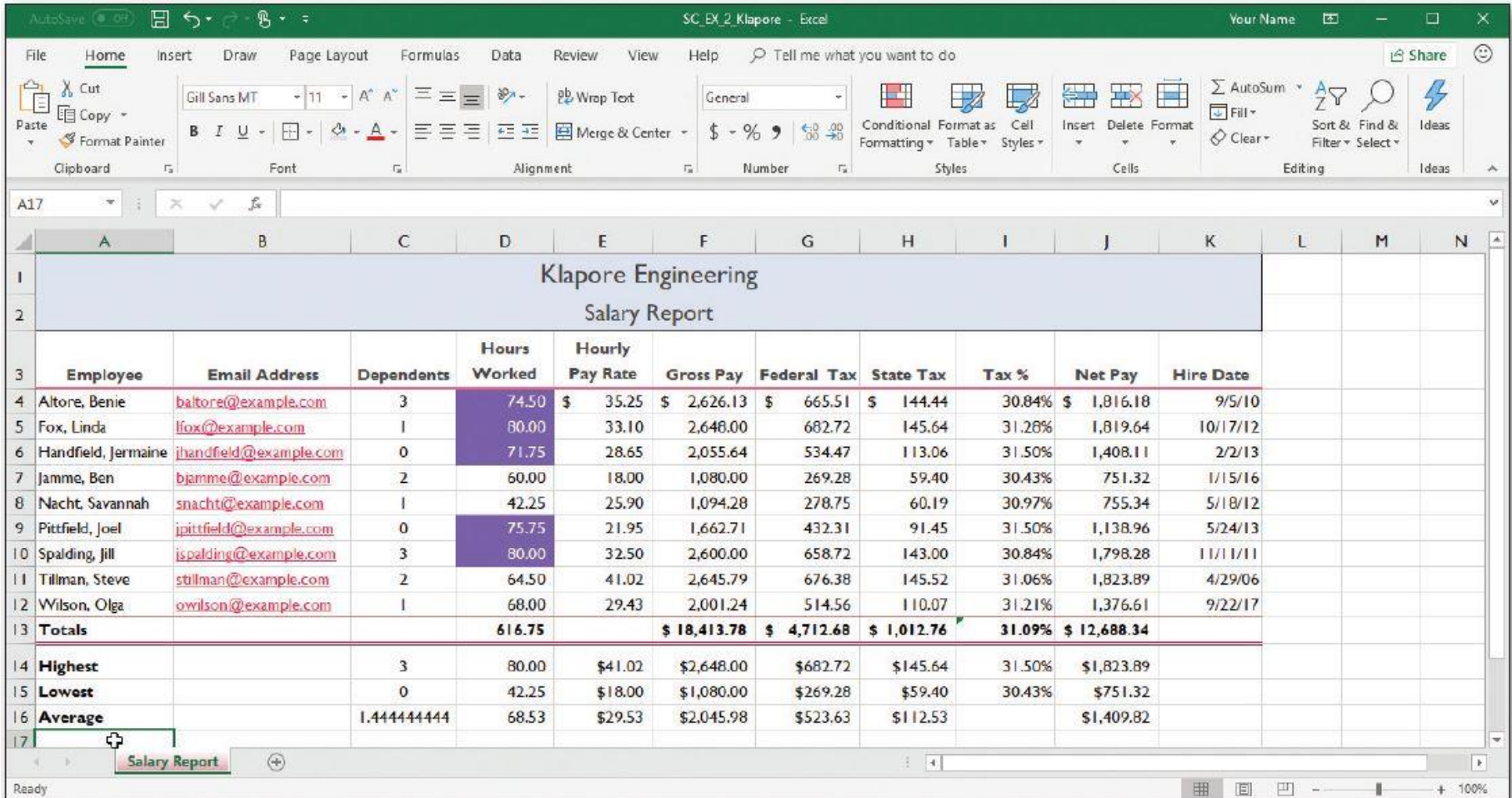
- Use Flash Fill
- Enter formulas using the keyboard
- Enter formulas using Point mode
- Apply the MAX, MIN, and AVERAGE functions
- Verify a formula using Range Finder
- Apply a theme to a workbook
- Apply a date format to a cell or range



Objectives (2 of 2)

- Add conditional formatting to cells
- Change column width and row height
- Check the spelling on a worksheet
- Change margins and headers in Page Layout view
- Preview and print versions and sections of a worksheet

Project: Worksheet with Formulas and Functions



Klapore Engineering										
Salary Report										
Employee	Email Address	Dependents	Hours Worked	Hourly Pay Rate	Gross Pay	Federal Tax	State Tax	Tax %	Net Pay	Hire Date
Altore, Benie	baltore@example.com	3	74.50	\$ 35.25	\$ 2,626.13	\$ 665.51	\$ 144.44	30.84%	\$ 1,816.18	9/5/10
Fox, Linda	lfox@example.com	1	80.00	33.10	2,648.00	682.72	145.64	31.28%	1,819.64	10/17/12
Handfield, Jermaine	jhandfield@example.com	0	71.75	28.65	2,055.64	534.47	113.06	31.50%	1,408.11	2/2/13
Jamme, Ben	bjamme@example.com	2	60.00	18.00	1,080.00	269.28	59.40	30.43%	751.32	1/15/16
Nacht, Savannah	snacht@example.com	1	42.25	25.90	1,094.28	278.75	60.19	30.97%	755.34	5/18/12
Pittfield, Joel	jpittfield@example.com	0	75.75	21.95	1,662.71	432.31	91.45	31.50%	1,138.96	5/24/13
Spalding, Jill	jspalding@example.com	3	80.00	32.50	2,600.00	658.72	143.00	30.84%	1,798.28	11/11/11
Tillman, Steve	sttillman@example.com	2	64.50	41.02	2,645.79	676.38	145.52	31.06%	1,823.89	4/29/06
Wilson, Olga	owilson@example.com	1	68.00	29.43	2,001.24	514.56	110.07	31.21%	1,376.61	9/22/17
Totals			616.75		\$ 18,413.78	\$ 4,712.68	\$ 1,012.76	31.09%	\$ 12,688.34	
Highest		3	80.00	\$41.02	\$2,648.00	\$682.72	\$145.64	31.50%	\$1,823.89	
Lowest		0	42.25	\$18.00	\$1,080.00	\$269.28	\$59.40	30.43%	\$751.32	
Average		1.444444444	68.53	\$29.53	\$2,045.98	\$523.63	\$112.53		\$1,409.82	

Table 1: A Salary Report Worksheet



Entering the Titles and Numbers into the Worksheet (1 of 2)

- **To Enter the Worksheet Title and Subtitle**

- Run Excel and create a blank workbook
- Select cell **A1** and type the desired worksheet title (**Klapore Engineering**), then press the DOWN ARROW key to enter it
- Select cell **A2** and type the worksheet subtitle (**Salary Report**) then press the DOWN ARROW key to enter it

- **To Enter the Column Titles**

- Select cell **A3** and type the desired text, then press the RIGHT ARROW key to enter the column heading
- Continue until all the columns you desire have headings
(**Employee, Email Address, Dependents, Hours** **ALT+ENTER**
Worked, Hourly **ALT+ENTER** **Pay Rates, Gross Pay, Federal Tax,**
State Tax, Tax %, Net Pay, Hire Date)



Entering the Titles and Numbers into the Worksheet (2 of 2)

- **To Enter the Salary Data**

- Select cell **A4**, type desired name (**Altore, Benie**), and then press the RIGHT ARROW key two times to enter the employee name and make cell **C4** the active cell
 - Type a number (**3**) in cell **C4** and then press the RIGHT ARROW key
 - Type a number of hours worked (**74.50**) in cell **D4** and then press the RIGHT ARROW key
 - Type an hourly rate (**35.25**) in cell **E4**
 - Click cell **K4** and type a date (9/5/10)
 - Use the data in **Table 2-1** to enter salary data in a worksheet
-



Flash Fill (1 of 2)

- **To Use Flash Fill – automatically fills or formats data in remaining cells based on patterns of previous cells**
 - Click a cell (B4)
 - Type desired text (baltore@example.com) and then press the DOWN ARROW to select the next cell (B5)
 - Type desired text (lfox@example.com) again following the same pattern (for example an email address)
 - Click Data on the ribbon to select the Data tab
 - Click Flash Fill (Data tab | Data Tools group) to enter similarly formatted text (email addresses in cells B6:B12)
 - Delete entries in cells B1:B2
-



Flash Fill (2 of 2)

- **To Enter the Row Titles**

- Select a cell in the A column (A13:A16)
- Type desired text and then press the DOWN ARROW key to enter a row header (Totals, Highest, Lowest, Average)
- Continue until all Rows have a header

- **To Change the Sheet Tab Name and Color**

- Double-click the Sheet1 tab and enter the desired text (Salary Report) as the sheet tab name and then press the ENTER key
 - Right-click the sheet tab to display the shortcut menu
 - Point to Tab Color on the shortcut menu to display the Tab Color gallery. Click desired color { Blue, Accent 1 (col 5, row 1) }
 - Save the workbook
-



Entering Formulas (1 of 5)

- **To Enter a Formula Using the Keyboard**
 - With the cell to contain the formula selected (F4), type the formula (=d4*e4) in the cell to display the formula in the formula bar and in the current cell and to display colored borders around the cells referenced in the formula
 - Press TAB to complete the arithmetic operation indicated by the formula, to display the result in the worksheet, and to select the cell to the right

Entering Formulas (2 of 5)

AutoSave Off

File Home Insert Draw Page Layout Formulas **Data** Review View Help

Get Data From Text/CSV From Web From Table Recent Sources Refresh All Queries & Connections Properties Edit Links Sort Filter

MAX : X ✓ fx =d4*e4

	A	B	C	D	E	F	G	H	I	J
1	Klapore Engineering									
2	Salary Report									
3	Employee	Email	Add	Depender	Hours	Hourly				
4	Altore, Be	baltore@e	3	74.5	35.25	=d4*e4				
5	Fox, Linda	lfox@exal	1	80	33.1					
6	Handfield	jhandfield	0	71.75	28.65					
7	Jamme, B	bjamme@	2	60	18					
8	Nacht Sa	snacht@e	1	42.25	25.9					
9				75.75	21.95					

formula begins with equal sign

as formula is typed, it appears in formula bar and in active cell F4

colored cell borders indicate which cells are included in formula in active cell



Entering Formulas (3 of 5)

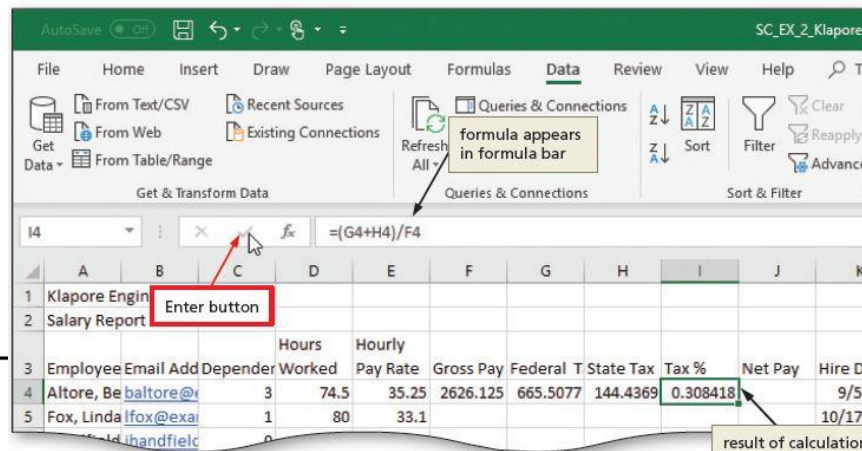
- **Arithmetic Operations and Their Order of Operations**
 - From left to right
 - First negation (-)
 - Then percentages (%)
 - Then all exponentiations (^)
 - Then all multiplications (*) and divisions (/)
 - Finally all additions (+) and subtractions (-)



Entering Formulas (4 of 5)

- **To Enter Formulas Using Point Mode**

- With the cell that is to contain the formula selected (G4), begin typing the formula and then click another cell to add a cell reference in the formula { $0.26*(F4-C4*22.16)$ }
- Finish typing the rest of the formula { $H4 = 0.055*F4,$
 $I4 = (G4 + H4) / F4, \quad J4 = F4 - (G4+H4)$ }
- Click the Enter box in the formula bar when you have finished entering the formula



Entering Formulas (5 of 5)

- **To Copy Formulas Using the Fill Handle**

- Select the source range (F4:J4), point to the fill handle, drag the fill handle down to desired location, and continue to hold the mouse button to select the destination range (F5:J12)
- Release the mouse to copy the formulas to the destination range

The screenshot shows an Excel spreadsheet titled "SC_EX_2.Klapore - Excel". The active cell is F4, containing the formula $=D4*E4$. The spreadsheet displays a salary report for Klapore Engineering. The data is as follows:

Employee	Email	Add	Depender	Worked	Hours	Hourly Pay Rate	Gross Pay	Federal Tax	T State Tax	Tax %	Net Pay	Hire Date	
Altore, Be	baltore@			3	74.5	35.25	2626.125	665.5077	144.4369	0.308418	1816.18	9/5/2010	
Fox, Linda	lfox@exa			1	80	33.1	2648	682.7184	145.64	0.312824	1819.642	10/17/2012	
Handfield,	handfieldc			0	71.75	28.65	2055.638	534.4658	113.0601	0.315	1408.112	2/2/2013	
Jamme, Bi	bjamme@			2	60	18	1080	269.2768	59.4	0.30433	751.3232	1/15/2016	
Nacht, Sav	snacht@e			1	42.25	25.9	1094.275	278.7499	60.18513	0.309735	755.34	5/18/2012	
Pittfield, J	jpittfield@			0	75.75	21.95	1662.713	432.3053	91.44919	0.315	1138.958	5/24/2013	
Spelding,	jspelding@			3	60	32.5	2600	658.7152	143	0.308352	1798.285	11/11/2011	
Tillman, S	stilt						41.02	2645.79	676.3822	145.5185	0.310645	1823.889	4/29/2006
Wilson, O	ow						29.43	2001.24	514.5608	110.0682	0.312121	1376.611	9/22/2017
Totals													
Highest													
Lowest													



Option Buttons (1 of 3)

Excel displays option buttons to indicate that you can complete an operation using automatic features.

Table 2-4 Option Buttons in Excel

Name	Menu Function
Auto Fill Options	Provides options for how to fill cells following a fill operation, such as dragging the fill handle
AutoCorrect Options	Undoes an automatic correction, stops future automatic corrections of this type, or causes Excel to display the AutoCorrect Options dialog box
Insert Options	Lists formatting options following an insertion of cells, rows, or columns
Paste Options	Specifies how moved or pasted items should appear (for example, with original formatting, without formatting, or with different formatting)
Trace Error	Lists error-checking options following the assignment of an invalid formula to a cell



Option Buttons (2 of 3)

- **To Determine Totals Using the AutoSum Button**
 - Display the Home tab
 - Select the desired cell to contain the sum (D13), click the AutoSum button (Editing group) to sum the contents of the range (D4:D12) and click ENTER to display the total in the selected cell
 - Select the range to contain the sums (F13:H13). Click the AutoSum button to display totals in the selected range
 - Select the cell to contain the sum (J13), click the AutoSum button to sum the contents of the range and click ENTER
-



Option Buttons (3 of 3)

- To Determine the Total Tax Percentage
 - Select the cell to be copied (I12) and then drag the fill handle down through the desired cell (I13) to copy the formula

Employee	Email Add	Depender	Hours Worked	Hourly Pay Rate	Gross Pay	Federal Tax	State Tax	Tax %	Net Pay	Hire Date	
Altore, Be	baltore@		3	74.5	35.25	2626.125	665.5077	144.4369	0.308418	1816.18	9/5/2010
Fox, Linda	lfox@exa		1	80	33.1	2648	682.7184	145.64	0.312824	1819.642	10/17/2012
Handfield, J	jhandfield		0	71.75	28.65	2055.638	534.4658	113.0601	0.315	1408.112	2/2/2013
Jamme, B	bjamme@		2	60	18	1080	269.2768	59.4	0.30433	751.3232	1/15/2016
Nacht, Sav	snacht@e		1	42.25	25.9	1094.275	278.7499	60.18513	0.309735	755.34	5/18/2012
Pittfield, J	jpittfield@		0	75.75	21.95	1662.713	482.3053	91.44919	0.315	1138.958	5/24/2013
Spalding, J	jspalding		3	80	32.5	2600	658.7152	143	0.308352	1798.285	11/11/2011
Tillman, S	stillman@		2	64.5	41.02	2645.79	676.3822	145.5185	0.310645	1823.889	4/29/2006
Wilson, O	owilson@		1	68	29.43	2001.24	514.5608	110.0682	0.312121	1376.611	9/22/2017
Totals			616.75			18413.78	4712.682	1012.758	0.310932	12688.34	

formula copied from I12 to I13



Using the AVERAGE, MAX, MIN, and other Statistical Functions (1 of 6)

- **To Determine the Highest Number in a Range of Numbers Using the Insert Function Dialog box**
 - Select the cell to contain the maximum number (C14)
 - Click the **Insert Function** button in the **formula bar** to display the Insert Function dialog box
 - If necessary, scroll to and then click **MAX** in the Select a function list
 - Click the OK button to display the Function Arguments dialog box and type the cell range (C4:C12) in the **Number1** box to enter the first argument of the function
 - Click the OK button to display the highest value in the chosen range in the selected cell
-



Using the AVERAGE, MAX, and MIN Functions (2 of 6)

- **To Determine the Lowest Number in a Range of Numbers Using the Sum Menu**
 - Select cell (C15) that is to contain the minimum value and then click the AutoSum arrow in the HOME tab
 - Click Min to display the MIN function in the formula bar and in the active cell
 - Drag through the range (C4:C12) of values of which you want to determine the lowest number
 - Click the Enter box to determine the lowest value in the range and display the result in the formula bar and in the selected cell
-

Using the AVERAGE, MAX, and MIN Functions (3 of 6)

Display of selected range appearing in the formula bar and active cell

The screenshot shows the Microsoft Excel interface with the following data in the spreadsheet:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Klapore Engineering												
2	Salary Report												
3	Employee	Email Add	Depender	Hours Worked	Hourly Pay Rate	Gross Pay	Federal T	State Tax	Tax %	Net Pay	Hire Date		
4	Altore, Be	baltore@	3	74.5	35.25	2625			0.308418	1816.18	9/5/2010		
5	Fox, Linda	lfox@exa	1	80	33.1	262			0.312824	1819.642	10/17/2012		
6	Handfield,	jhandfield	0	71.75	28.65	2055			0.315	1408.112	2/2/2013		
7	Jamme, B	bjamme@	2	60	18	1080	269.2768	59.4	0.30433	751.3232	1/15/2016		
8	Nacht, Sa	snacht@e	1	42.25	25.9	1094.275	278.7499	60.18513	0.309735	755.34	5/18/2012		
9	Pittfield,	jpittfield	0	75.75	22.95	1662.713	432.3053	91.44919	0.315	1138.958	5/24/2013		
10	Spalding,	jspalding	3	80	32.5	2600	658.7152	143	0.308352	1798.285	11/11/2011		
11	Tillman, S	stillman@	2	64.5	41.02	2645.79	676.3822	145.5185	0.310645	1823.889	4/29/2006		
12	Wilson, O	owilson@	1	68	29.43	2001.24	514.5608	110.0682	0.312121	1376.611	9/22/2017		
13	Totals			616.75		18413.78	4712.682	1012.758	0.310932	12688.34			
14	Highest		3										
15	Lowest												
16	Average												

The formula bar shows the formula: `=MIN(C4:C12)`. A callout box points to the formula bar and the active cell (C15), stating: "selected range appears in formula bar and active cell".



Using the AVERAGE, MAX, and MIN Functions (4 of 6)

- **To Determine the Average of a Range of Numbers Using the Keyboard**
 - Select the cell (C16) that will contain the average
 - Type =av in the cell to display the Formula AutoComplete list
Press the DOWN ARROW key to highlight the required formula (AVERAGE)
 - Double-click AVERAGE in the Formula AutoComplete list to select the function
 - Select the range (C4:C12) to be averaged to insert the range as the argument to the function
 - Click the Enter box to compute the average of the numbers in the selected range and display the result in the selected cell

Using the AVERAGE, MAX, and MIN Functions (5 of 6)

Display of Formula AutoComplete list and AVERAGE function name

The screenshot shows an Excel spreadsheet with a salary report. The data is as follows:

Employee	Email	Add	Depender	Hours Worked	Hourly Pay Rate	Gross Pay	Federal Tax	State Tax	Tax %	Net Pay	Hire Date
Altore, Be	baltore@		3	74.5	35.25	2626.125	655.5077	144.4369	0.308418	1816.18	9/5/2010
Fox, Linda	lfox@exa		1	80	33.1	2648	682.7184	145.64	0.312824	1819.642	10/17/2012
Handfield	handfield		0	71.75	28.65	2055.638	534.4658	113.0601	0.315	1408.112	2/2/2013
Jamme, B	bjamme@		2	60	18			59.4	0.30433	751.3232	1/15/2016
Nacht, Sai	snacht@e		1	42.25	25.9			18513	0.309735	755.34	5/18/2012
Pittfield, J	jpittfield		0	75.75	21.95			44919	0.315	1138.958	5/24/2013
Spalding, J	jspalding		3	80	32.5	2600	658.7152	143	0.308352	1798.285	11/11/2011
Tillman, S	stillman@		2	64.5	41.02	2645.79	676.3822	145.5185	0.310645	1823.889	4/29/2006
Wilson, O	owilson@		1	68	29.43	2001.24	514.5608	110.0682	0.312121	1376.611	9/22/2017
Totals				616.75		18413.78	4712.682	1012.758	0.310932	12688.34	
Highest			3								
Lowest			0								
Average											

The Formula AutoComplete list for the AVERAGE function is shown below:

- AVEDEV
- AVERAGE** Returns the average (arithmetic mean) of its arguments, which can be numbers or names, arrays, or ref
- AVERAGEA
- AVERAGEIF
- AVERAGEIFS

Annotations in the image include:

- A red box labeled "AVERAGE function name" pointing to the AVERAGE function in the list.
- A red box labeled "cell C16" pointing to the cell containing the formula.
- A yellow box labeled "Formula AutoComplete list" pointing to the list of functions.
- A yellow box labeled "=av entered in cell and formula bar" pointing to the formula bar.



Using the AVERAGE, MAX, and MIN Functions (6 of 6)

- **To Copy a Range of Cells across Columns to an Adjacent Range Using the Fill Handle**
 - Select the source range (C14:C16) from which to copy the functions
 - Drag the fill handle in the lower-right corner of the selected range through the desired selection cell to copy the functions to the selected range (through J16)
 - Select cell I16 and delete the average of Tax % which is mathematically invalid
-

Verifying Formulas using Range Finder

- To Verify a Formula Using Range Finder
 - Double-click a cell (I4) to activate Range Finder
 - Press the ESC key to quit Range Finder and then click anywhere in the worksheet to deselect the current cell

cells referenced in formula in active cell are highlighted with corresponding colors

	A	B	C	D	E	F	G	H	I	J	K	
1	Klapore Engineering											
2	Salary Report											
3				Hours	Hourly							
	Employee	Email	Add	Depender	Worked	Pay Rate	Gross Pay	Federal Tax	State Tax	Tax %	Net Pay	Hire Date
4	Altore, Be	baltore@e		3	74.5	35.25	2626.125	665.5077	144.4369	=(G4+H4)/F4		9/5/2010
5	Fox, Linda	lfox@exa		1	80	33.1	2648	682.7184	145.64	0.312824	1819.642	10/17/2012
6				0	71.75							

Formatting the Worksheet (1 of 15)

Employee	Email Address	Dependents	Hours Worked	Hourly Pay Rate	Gross Pay	Federal Tax	State Tax	Tax %	Net Pay	Hire Date
Altore, Ben	baltore@example.com	3	74.5	35.25	2626.125	665.5077	144.4369	0.308418	1816.18	9/5/2010
Fox, Linda	lfox@example.com	1	80	33.1	2648	682.7184	145.64	0.312824	1819.642	10/17/2012
Handfield, Jermaine	jhandfield@example.com	0	71.75	28.65	2055.638	534.4658	113.0601	0.315	1408.112	2/2/2013
Jamme, Ben	bjamme@example.com	2	60	18	1080	269.2768	59.4	0.30433	751.3232	1/15/2016
Nacht, Savannah	snacht@example.com	1	42.25	25.9	1094.275	278.7499	60.18513	0.309735	755.34	5/18/2012
Pittfield, Joel	jpittfield@example.com	0	75.75	21.95	1662.713	432.3053	91.44919	0.315	1138.958	5/24/2013
Spalding, Jill	jspalding@example.com	3	80	32.5	2600	658.7152	143	0.308352	1798.285	11/11/2011
Tillman, Steve	sttillman@example.com	2	64.5	41.02	2645.79	676.3822	145.5185	0.310645	1823.889	4/29/2006
Wilson, Olga	owilson@example.com	1	68	29.43	2001.24	514.5608	110.0682	0.312121	1376.611	9/22/2017
Totals			616.75		18413.78	4712.682	1012.758	0.310932	12688.34	
Highest		3	80	41.02	2648	682.7164	145.64	0.315	1823.889	
Lowest		0	42.25	18	1080	269.2768	59.4	0.30433	751.3232	
Average	1.444444	68.52778	29.53333	2045.976	523.6313	112.5287			1409.816	

(a) Unformatted Worksheet

In Model 1 we used cell styles to format worksheet.
In Model 2 we will use themes to format the worksheet.

Klapore Engineering Salary Report										
Employee	Email Address	Dependents	Hours Worked	Hourly Pay Rate	Gross Pay	Federal Tax	State Tax	Tax %	Net Pay	Hire Date
Altore, Benie	baltore@example.com	3	74.50	\$ 35.25	\$ 2,626.13	\$ 665.51	\$ 144.44	30.84%	\$ 1,816.18	9/5/10
Fox, Linda	lfox@example.com	1	80.00	33.10	2,648.00	682.72	145.64	31.28%	1,819.64	10/17/12
Handfield, Jermaine	jhandfield@example.com	0	71.75	28.65	2,055.64	534.47	113.06	31.50%	1,408.11	2/2/13
Jamme, Ben	bjamme@example.com	2	60.00	18.00	1,080.00	269.28	59.40	30.43%	751.32	1/15/16
Nacht, Savannah	snacht@example.com	1	42.25	25.90	1,094.28	278.75	60.19	30.97%	755.34	5/18/12
Pittfield, Joel	jpittfield@example.com	0	75.75	21.95	1,662.71	432.31	91.45	31.50%	1,138.96	5/24/13
Spalding, Jill	jspalding@example.com	3	80.00	32.50	2,600.00	658.72	143.00	30.84%	1,798.28	11/11/11
Tillman, Steve	sttillman@example.com	2	64.50	41.02	2,645.79	676.38	145.52	31.06%	1,823.89	4/29/06
Wilson, Olga	owilson@example.com	1	68.00	29.43	2,001.24	514.56	110.07	31.21%	1,376.61	9/22/17
Totals			616.75		\$ 18,413.78	\$ 4,712.68	\$ 1,012.76	31.09%	\$ 12,688.34	
Highest		3	80.00	\$41.02	\$2,648.00	\$682.72	\$145.64	31.50%	\$1,823.89	
Lowest		0	42.25	\$18.00	\$1,080.00	\$269.28	\$59.40	30.43%	\$751.32	
Average	1.444444444	68.53	\$29.53	\$2,045.98	\$523.63	\$112.53			\$1,409.82	

(b) Formatted Worksheet

Formatting the Worksheet (3 of 15)

- **To Format the Worksheet Titles**

- Display the **Home** tab. Select the range (A1:K1) & (A2:K2) to be merged, click **MERGE & CENTER**
- Select the range (A1:A2) to contain the Title cell style, click **Cell Styles** button to display the Cell Styles gallery and choose a style (**Title**)
- Select **A2** and click “**Decrease Font Size**” button (**Font group**)

The screenshot shows the Microsoft Excel interface with the Home tab selected. The ribbon includes the Font group (with 'Increase Font Size' and 'Decrease Font Size' buttons highlighted), the Paragraph group (with the 'Merge & Center' button highlighted), and the Styles group (with the 'Cell Styles' button highlighted). The worksheet displays a title 'Klapore Engineering' in row 1 and a subtitle 'Salary Report' in row 2, both merged across columns A to K. A data table follows, starting with a header row (row 3) and data rows (rows 4-7). The font size of the subtitle 'Salary Report' is visibly smaller than the title.

Employee	Email Address	Dependent	Hours Worked	Hourly Pay Rate	Gross Pay	Federal Tax	State Tax	Tax %	Net Pay	Hire Date
Altore, Ben	baltore@ex	3	74.5	35.25	2626.125	665.5077	144.4369	0.308418	1816.18	9/5/2010
Fox, Linda	lfox@exam	1	80	33.1	2648	682.7184	145.64	0.312824	1819.642	10/17/2012
Handfield, J	jhandfield@	0	71.75	28.65	2055.638	534.4658	113.0601	0.315	1408.112	2/2/2013
Jamme, P			60	18				0.30433	751.3232	



Formatting the Worksheet (4 of 15)

- **To Change the Background Color and Apply a Box Border to the Worksheet Title and Subtitle**
 - Select the range (A1:A2) to color and then click the **Fill Color arrow** (HOME tab | Font group) to display the Fill Color gallery
 - Click a color (**Indigo, Accent 5, Lighter 80%**) (col 9, row 2) to select it and change the background color of the cells
 - Click the **Borders arrow** (HOME tab | Font group) to display the Borders gallery
 - Click a border (**Outside Borders**) in the Borders gallery to select it and display a border around the selected range
-



Formatting the Worksheet (5 of 15)

- **To Apply a Cell Style to the Column Headings and Format the Total Rows**
 - Select the range (A3:K3) to be formatted
 - Use the Cell Styles gallery (Home tab | Styles group) to apply the cell style (Heading 3)
 - Click the Center button (Home tab | Alignment group) to center the column headings
 - Apply the Total cell style to the range (A13:K13)
 - Bold the range (A14:A16)
-



Formatting the Worksheet (6 of 15)

- **To Format Dates and Center Data in Cells**
 - Select the range (K4:K12) to contain the new date format
 - On the HOME tab in the Number group, click the Dialog Box Launcher (lower right) to display the Format Cells dialog box
 - If necessary, click the NUMBER tab and click Date in the Category list, and then click a date type (3/14/12) to choose the format for the selected range
 - Click the OK button to format the dates in the current column using the selected date format style
 - Select the range (C4:C16) to be centered and then click the Center button (HOME tab | Alignment group) to center the data in the selected range
-



Formatting the Worksheet (7 of 15)

- **To Apply an Accounting Number Format and Comma Style Format Using the Ribbon**
 - Select the range (E4:H4) to contain the accounting number format
 - While holding down the CTRL key, select the nonadjacent ranges and cells (J4, F13:H13, J13)
 - Click the “Accounting Number Format” button (HOME tab | Number group) to apply the accounting number format to the selected nonadjacent ranges
 - Click the “Comma Style” button (HOME tab | Number group) to assign the Comma style format to the selected range (E5:H12, J5:J12, D4:D16)
-



Formatting the Worksheet (8 of 15)

- **To Apply a Currency Style Format with a Floating Dollar Sign Using the Format Cells Dialog Box**
 - Select the range (E14:H16, J14:J16) to format and then on the HOME tab in the Number group, click the Dialog Box Launcher to display the Format Cells dialog box
 - If necessary, click the NUMBER tab to display the Number sheet
 - Click **Currency** in the Category list to select the necessary number format category, Click **\$** in the Symbol list and then tap or click a style in the Negative numbers list to select the desired currency format (**\$1,234.10**)
 - Click the OK button to assign the currency style format to the selected ranges



Formatting the Worksheet (9 of 15)

- **To Apply Percent Style Format and Using the Increase Decimal Button**
 - Select the range to format (I4:I15)
 - Click the **Percent Style button** (HOME tab | Number group) to display the numbers in the selected range as a rounded whole percent
 - Click the **Increase Decimal button** (HOME tab | Number group) **two times** to display the numbers in the selected range with two decimal places
-



Formatting the Worksheet (10 of 15)

- **To Apply Conditional Formatting**

- Select the range (D4:D12) to which you wish to apply conditional formatting (*a value > 70 will appear with a purple background and a white font*)
- Click the **Conditional Formatting** button (HOME tab | Styles group) to display the Conditional Formatting menu
- Click **New Rule** in the Conditional Formatting menu to display the New Formatting Rule dialog box
- Click the desired rule type (**Format only cells that contain**) in the Select a Rule Type area
- Select and type the desired values in the Edit the Rule Description area (2nd box: greater than, 3rd box: 70)



Formatting the Worksheet (11 of 15)

- **To Apply Conditional Formatting (continued)**
 - Click the **Format button** (New Formatting Rule dialog box) to display the Format Cells dialog box
 - If necessary, click the **font tab** (Format Cells dialog box)
 - Click the **Color arrow** to display the Color gallery and then click **White Background 1** (col #1, row #1) to select the font color
 - Click the **Fill tab** (Format Cells dialog box) and click the **purple color** (col #8, row #1) to select the background color
 - Click OK (Format Cells dialog box)
 - Click OK (New Formatting Rule dialog box)
-



Formatting the Worksheet(12 of 15)

Table 2-5 Summary of Conditional Formatting Relational Operators

Relational Operator	Formatting will be applied if...
Between	cell value is between two numbers
not between	cell value is not between two numbers
equal to	cell value is equal to a number
not equal to	cell value is not equal to a number
greater than	cell value is greater than a number
less than	cell value is less than a number
greater than or equal to	cell value is greater than or equal to a number
less than or equal to	cell value is less than or equal to a number



Formatting the Worksheet (13 of 15)

- **To Change Column Width**

- Drag through column headings (A, B, C) to select the columns
 - Point to the **boundary** on the right side of column heading to cause the pointer to become a **split double arrow**
 - **Double-click** the right boundary of the column to change the width of the selected columns to best fit
 - To resize a column (H) by dragging, point to the boundary of the right side of the column heading. When the mouse pointer changes to a split double arrow, drag to the desired width (**ScreenTip: 10.38 / 88 pixels**), and then lift your finger or release the mouse button to change the column widths
-



Formatting the Worksheet (14 of 15)

- **To Change Column Width (Continued)**

- Click and drag **column D, E & I headings** above row 1 to select these nonadjacent columns
 - Point to the right side of the **column I heading boundary**
 - Drag until ScreenTip shows **Width: 10.50 (89 pixels)** and then release the mouse button
 - Click and drag **column headings (F, G, J & K)** to select these nonadjacent columns
 - Drag the **boundary** on the right side of the **column G** until the ScreenTip indicates **Width: 11.13 (94 pixels)**
 - Release the button to change the column widths
-



Formatting the Worksheet (15 of 15)

- **To Change the Row Height**

- Point to the **boundary** below the row heading (3) to resize until the pointer becomes a split double arrow
- Drag the **boundary** to the desired row height (**ScreenTip: 39.00 / 52 pixels**) and then release the mouse button
- Lift your finger or release the mouse button to change the row height
- Do the same for **row heading (14)** to change the row height to **ScreenTip: 24.00 (32 pixels)**



Checking Spelling

- **To Check Spelling on the Worksheet**
 - Click cell A1 so that the spell checker begins at the beginning of the worksheet
 - Click the Spelling button (REVIEW tab | Proofing group) to run the spell checker and display the misspelled words in the Spelling dialog box
 - Apply the desired action to each misspelled word
 - When the spell checker is finished, click the Close button



Printing the Worksheet (1 of 3)

- **To Change the Worksheet's Margins, Header, and Orientation in Page Layout View**
 - Click the **Page Layout button** on the status bar to view the worksheet in Page Layout view
 - Click the **Margins button** (PAGE LAYOUT tab | Page Setup group) to display the Margins gallery
 - Click the desired **margin style (Narrow)** to change the worksheet margins to the selected style
 - Click above cell A1 in **the center area of the Header area**
 - Type the desired worksheet **header (Madelyn Samuels + ENTER + Chief Financial Officer)**, and then deselect the header
 - Click the **"Orientation" button** (PAGE LAYOUT tab | Page Setup group) to display the Orientation gallery
 - Click the desired orientation (**Landscape**) to change the orientation
 - Double click the borders of **column headings F & J to best fit the columns**



Printing the Worksheet (2 of 3)

- **To Print a Worksheet**

- Click **FILE** on the ribbon to open Backstage view
- Click the **Print** to display the Print screen
- If necessary, click Printer Status button to display a list of available printer and click the desired printer
- Click the **No Scaling button** and then select “**Fit Sheet on One Page**”
- Click Print



Printing the Worksheet (3 of 3)

- **To Print a Section of the Worksheet**

- Select the range to print (A3:F16)
 - Click FILE on the ribbon to open Backstage view
 - Click the Print to display the Print screen
 - Click “Print Active Sheets” in the Settings area on the PRINT screen to display a list of printing options
 - Click Print Selection to print the selected range
 - Click the Print button in the Print screen to print the selected range of the worksheet
 - Click the Normal button on the status bar to return to Normal view
-



Displaying and Printing the Formulas Version of the Worksheet (1 of 2)

- **To Display the Formulas in the Worksheet and Fit the Printout on One Page**
 - Press **CTRL+ACCENT MARK (`)** to display the worksheet with formulas
 - Click **the Page Setup Dialog Box Launcher** (PAGE LAYOUT tab | Page Setup group) to display the Page Setup dialog box
 - If necessary, click the **Landscape** Orientation in the Page sheet
 - If necessary, click **Fit to** in the Scaling area to select it
 - Click the **Print button** to open the Print screen in Backstage view. Select the Print Selection button in the Settings area of the Print gallery and then click **Print Active Sheets**
 - Click the Print button to print the worksheet
 - After viewing and printing the formulas version, press **CTRL+ACCENT MARK (`)** to display the values version



Displaying and Printing the Formulas Version of the Worksheet (2 of 2)

- **To Change the Print Scaling Option Back to 100%**
 - Click the Page Setup Dialog Box Launcher on the PAGE LAYOUT tab to display the Page Setup dialog box
 - Click the **Adjust to** option button in the Scaling area to select the Adjust to setting
 - If necessary, type **100** in the Adjust to box to adjust the print scaling to **100%**
 - Click OK
 - Display the Home tab
 - Save the workbook, sign out and exit Excel
-