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# MATHCOUNTS®

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**2018**  
**■ Chapter Competition ■**  
**Answer Key**

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The appropriate units (or their abbreviations) are provided in the answer blanks.

**Note to coordinators:** Answers to the Tiebreaker Round problems appear in the Tiebreaker Round Booklet.

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## Sprint Round

1. 2018

2. 35 minutes

3.  $\frac{\$ 200}{\text{or } 200.00}$

4. 4

5. \$ 56 or 56.00

6. 4

7. 12 apples

8. 6

9. 2

10. 10

11. 8

12. 240 in<sup>3</sup>

13. 8

14. 50 cents

15. 15

## Sprint Round

16. 50 degrees

21. 4

26.  $-\frac{3}{4}$

17. 15 amounts

22. 4

27. 30

18. 45

23. 36 rectangles

28.  $\frac{50\sqrt{5}}{9}$  units<sup>2</sup>

19. 31

24. 46,207

29.  $\frac{12}{35}$

20. 18

25. \$99 or 99.00

30.  $\frac{7}{5832}$

### Target Round

1.  $\underline{171 \text{ minutes}}$

3.  $\underline{22}$

5.  $\underline{440 \text{ seconds}}$

7.  $\underline{2\pi \text{ cm}^2}$

2.  $\underline{-\frac{5}{2}}$

4.  $\underline{4096}$

6.  $\underline{4.8 \text{ percent}}$

8.  $\underline{-95}$

## Team Round

1. 9 ways

2. 172 degrees

3. 52

4. 4

5. \$2.25

6.  $\frac{7}{4}$

7. 1015

8. 315 triangles

9. \$7.50

10. 2040 permutations

## Countdown Round

1.  $\underline{5050}$

2.  $\underline{-56}$

3.  $\underline{10 \text{ (points)}}$

4.  $\underline{4 \text{ (minutes)}}$

5.  $\underline{31 \text{ (games)}}$

6.  $\underline{2}$

7.  $\underline{97,315}$

8.  $\underline{632.14}$

9.  $\underline{94}$

10.  $\underline{8}$

11.  $\underline{225 \text{ (dollars)}}$

12.  $\underline{253 \text{ (tickets)}}$

13.  $\underline{-168}$

14.  $\underline{32}$

15.  $\underline{64 \text{ (home runs)}}$

16.  $\underline{11}$

17.  $\underline{33 \text{ (hours)}}$

18.  $\underline{29 \text{ (eggs)}}$

19.  $\underline{\frac{3}{4}}$

20.  $\underline{2 \text{ (students)}}$

21.  $\underline{74}$

22.  $\underline{3}$

23.  $\underline{\frac{1}{5}}$

24.  $\underline{21\pi \text{ (ft}^2\text{)}}$

25.  $\underline{1}$

26.  $\underline{16}$

27.  $\underline{4 \text{ (dollars)}}$

28.  $\underline{447}$

29.  $\underline{80 \text{ (seconds)}}$

30.  $\underline{24 \text{ (units}^2\text{)}}$

31.  $\underline{45 \text{ (dollars)}}$

32.  $\underline{\frac{10}{3} \text{ (units)}}$

33.  $\underline{45 \text{ (degrees)}}$

34.  $\underline{\frac{1}{4}}$

35.  $\underline{5}$

36.  $\underline{-\frac{3}{2}}$

37.  $\underline{1 \text{ (unit cubes)}}$

38.  $\underline{200 \text{ (dollars)}}$

39.  $\underline{30}$

40.  $\underline{5000}$

## Countdown Round

41. 7 (miles)

42. 7 (chickens)

43. 9 (buses)

44.  $\frac{2}{3}$

45. 61

46. 5

47. 2

48. 20 (blue marbles)

49. 75 (degrees)

50. 25 (dollars)

51. 168 (words)

52. 9

53. 45 (in<sup>3</sup>)

54. 40 (degrees)

55. 8 (servings)

56.  $\frac{3}{7}$

57. 70

58. 9

59. 6

60. 16 (percent)

61.  $\frac{3}{2}$

62.  $\frac{1}{108}$

63. 50 (percent)

64. 4 (hours)

65. 9 (prime numbers)

66. 64 (cm)

67. 13

68.  $\frac{1}{221}$

69. 1.2 (m/s)

70. 9

71. 8 (shots)

72. 7 (sides)

73. 6 (zeros)

74.  $\frac{61}{125}$

75. 4

76.  $\frac{3}{4}$

77. 10 (sides)

78.  $\frac{2}{65}$

79. 150,000 (dollars)

80. 54