MAP 260 (T1) Issue 2

Answer Key

1. 167

2. $16\frac{4}{7}$

3. $\frac{16}{81}$

4. 0.25

5. $12 \times 3 + 23 \times 2 = 82$

6. 4

7. 4

8. 9

9. $(9 - 8) + (7 - 6) + (5 - 4) + (3 - 2) + 1 = 5$

10. 51

11. 9:40 A.M.

12. $8 + 3 = 11$
    $5+2 = 7$ (width)
    $11 \times 7 = \boxed{77 \text{ ft}^2}$

13. $\frac{1}{2} \times 50 = 25$
    $25 + 50 = \boxed{75}$

14. What is the width?
    $8 - 2 - 2 = 4$
    What is the length?
    $10 + 4 - 6 = 8$
    Thus, the area is
    $8 \times 4 = \boxed{32 \text{ in}^2}$.

15. 12,059

16. $12 \div 3 = 4$
    $4 \times 5 = \boxed{\$20.00}$

17. Kim: $163 + 347 = 510$
    Bill: $300 \times 2 = 600$
    Difference: $600 - 510 = \boxed{90}$

18. $21 \div 3 = 7$
    $21 - 7 = \boxed{14}$

19. $3 \times 12 + 14 = 36 + 14 = 50$ (min)

20. $30 - 6 = 24$
    $24 = 16 + 8$
    $16 + 3 + 3 = \boxed{22 \text{ yrs old}}$

21. 9

22. 8

23. $20 \times 3 - 12 - 15 = \boxed{33}$

24. $\begin{aligned}\square\quad 4 + 1\frac{5}{8}\\ -\quad 4 + \frac{1}{3}\end{aligned} = \begin{aligned}\square\quad 1\frac{5}{8}\\ -\quad \frac{1}{3}\end{aligned} = 1\frac{7}{24} = 1\ 7/24$

25. 64

26. 5:10 A.M. - 9:40 P.M.
    = 5:10 - 9:40 + 12:00 (next day)
    = 17:10 - 9:40
    = 7:30
    = 7 hr & 30 min

27. $\frac{3}{7} = \frac{9}{21} = \frac{12}{28}$
    $9+28 = \boxed{37}$

28. 93

29. ⅝ = 5/8

30. $72000 \div 6 + 600 \div 2 + 900 \div 20$
    = 12000+300+45
    = $\boxed{12345}$

31. $36 \div 4 = 9$
    $9 \div 3 = 3$ in (each side of a square)
    $3 \times 3 \times 5 = \boxed{45 \text{ in}^2}$

32. 9

33. $13 - 5 = 8$ (length)
    $8 - 2 - 2 = 4$ (width)
    $8 \times 4 = 32 \text{ m}^2$ (area)

34. 150

35. $30\frac{3}{4} - 12\frac{5}{8} = 18\frac{1}{8} = 18\ 1/8$ pounds

36. $24 \times 60 = 1440$ min
    $1440 \times 7 = 10080$ min

37. $60 \div 4 = 15$
    $15 \times 3 = \boxed{45}$

38. 14:15 - 8:55 = 5:20
    (5 hr 20 min)$\div 4 = \boxed{1 \text{ hr & 30 min}}$

39. $90+73+80 = 243$
    $243 \div 3 = \boxed{81}$

40. $85 \times 4 = 340$
    $340 - 243 = \boxed{97}$

41. 16/81

42. 1

43. 0.5

44. .005

45. 3000

46. 6

47. $x = 4$

48. $\frac{1}{4} = 1/4$

49. $1\frac{3}{5}$

50. 2

51. $4^5 \div 2^7 = 2^{10} \div 2^7 = 2^3$
    $\square = 3$

52. 3

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53. A

54. H(-6, -6)

55. 600×0.6 = $360

56. 2,400,000÷3,000,000 = $0.80

57. 20% : 80% = 1 : 4 = 25 : 100
    Saved: $25

58. The area = $\frac{1}{2}$×12×16
    = 96 = $\frac{1}{2}$×h×20
    h = 9.6 cm

59. Let x be the number of students.
    $3x + 5 = 4x - 21$
    $x = 26$

60. B
    24 + 16 = 40

61. 2¼

62. 90

63. $0.5^3 ×0.6^3 = (0.5×0.6)^3 = 0.3^3 = 0.027$

64. 0

65. 2

66. ⅐

67. 70

68. -1

69. 20
    12, 16, x) = 4(3, 4, 5), x = 20, the diameter is 20.

70. 122
    The circle has an area of $10^2\pi$ = 314, the area of
    the shaded region is
    314 - 12×16
    = 314 - 192
    = 122

71. 1 yard = 3 ft
    1 sq. yard = 9 sq. ft
    18×10 = 180 sq. ft = 20 sq. yard
    15×20 = $300

72. area = 120
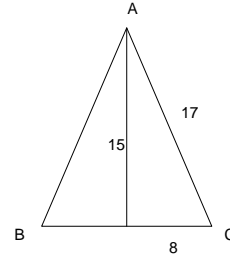
73. (72÷3)×0.35
    = 24×0.35
    = 12×0.7
    = $8.40

74. It needs 5 pieces of casserole
    Ans = 10 eggs & 15 ounces of butter

75. What is the width of the outer rectangle?
    20 + 2×5 = 30
    What is the length of inner rectangle?
    40 - 2×5 = 30
    The area of the path:
    40×30 - 30×20 = 1200 - 600 = 600 ft²

76. 1000 + 200×8 = 2600
    2600 - 2000)÷2000 = 30%

77. What part of the radio sets remains unsold after
    two-day sale? It is 1 - ⅓ - ½×⅔ = ⅓. Therefore, ⅔
    is sold, twice as many as the remaining ones. The
    number of being sold is therefore
    50×2 = 100

78. 9×10×10×5 = 4500

79. ¼(144π) = 36π

80. 6×40 = 240 (in)
    1 yard = 3 ft = 36 in
    6×36 = 216
    7×36 = 252
    Ans = 7 rolls (enough)

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