

# Answer Key

1. 7
2. 7
3. -7
4. 27
5. 4
6. 3
7. 1
8. 25
9. -7
10. -24
11. -5
12. -2
13. -27
14. 22
15. 3
16. 4
17. -3
18. -7
19. 4
20. -7
21. 1
22. 3
23. 3
24. 3
25. 2
26. 3
27. 2.5
28. 16
29. 3
30. 3

$$31. \quad \begin{array}{r} 2\frac{8}{24} \\ - \frac{21}{24} \\ \hline \end{array} + \begin{array}{r} 1\frac{8}{24} \\ + \frac{3}{24} \\ \hline \end{array} = 1\frac{11}{24}$$

$$32. \quad \frac{21-1}{35} = \frac{20}{35} = \frac{4}{7}$$

$$33. \quad \begin{array}{r} \frac{9}{24} \\ + \frac{4}{24} \\ \hline \end{array} = \frac{13}{24}$$

$$34. \quad \begin{array}{r} \frac{28}{60} \\ - \frac{21}{60} \\ \hline \end{array} = \frac{7}{60}$$

$$35. \quad \frac{7}{12} - \frac{3}{8} = \frac{14-9}{24} = \frac{5}{24}$$

$$36. \quad \begin{array}{r} \frac{21}{60} \\ - \frac{2}{60} \\ \hline \end{array} = \frac{19}{60}$$

$$37. \quad 8\frac{1}{8} + \frac{2}{8} = 8\frac{3}{8}$$

$$38. \quad \frac{21}{35} - \frac{11}{35} = \frac{10}{35} = \frac{2}{7}$$

$$39. \quad \begin{array}{r} 4\frac{1}{24} \\ - \frac{21}{24} \\ \hline \end{array} + \begin{array}{r} 3\frac{1}{24} \\ + \frac{3}{24} \\ \hline \end{array} = 3\frac{4}{24} = 3\frac{1}{6}$$

$$40. \quad \begin{array}{r} \frac{8}{30} \\ - \frac{5}{30} \\ \hline \end{array} = \frac{3}{30} = \frac{1}{10}$$

$$41. \quad \frac{6}{24} = \frac{1}{4} = 0.25 = 25\%$$

$$42. \quad \text{(a) } 25\% \text{ (b) } 75\%$$

$$43. \quad \text{(a) } 60\% \text{ (b) } 40\%$$

$$44. \quad 1 - 24\% - 13\% - 41\% = \underline{22\%}$$

$$45. \quad \frac{3}{8} = 37.5\%$$

$$46. \quad 0.55 \times 40 = 22$$

$$47. \quad 620 \times 0.55 = \$341$$

$$48. \quad 75 \times \frac{1}{5} = 15$$

$$49. \quad 19 \times 2 - 16 = 22$$

$$50. \quad 120 \times 60\% = 120 \times 0.6 = 12 \times 6 = 72 \text{ lb}$$

$$51. \quad \frac{15}{4} = \frac{60}{16}$$

$$A = 16$$

$$52. \quad 160000$$

$$53. \quad 576$$

$$54. \quad \text{sum} = 3 \times 15 = 45$$

$$5 + 10 + \square = 45$$

$$\square = 30$$

$$55. \quad \frac{11}{30} = 11/30$$

$$56. \quad 13 - 14 + 15 - 16 + 17 - 18 + 19$$

$$= 13 + (-14 + 15) + (-16 + 17) + (-18 + 19)$$

$$= 13 + 1 + 1 + 1$$

$$= 16$$

$$57. \quad 5 \text{ \& } 5 \text{ (R)}$$

$$58. \quad 96$$

$$59. \quad 5.40$$

$$60. \quad 200 \div 10 = 20 \text{ (length)}$$

$$\text{perimeter} = 2(10 + 20) = 60 \text{ in}$$

$$61. \quad (-1)^{1 \times 2 \times 3} = (-1)^6 = \mathbf{1}$$

[Note:  $(-1)^{\text{even}} = 1, (-1)^{\text{odd}} = -1$ ]

$$62. \quad 0.08$$

# MAP 260 (T1) Issue 8

63.  $\frac{3}{14} = 3/14$

64. .00007

65.  $3600 \div 9 = 400 \text{ yd}^2$

66. 15

67.  $200 \times 2800 = 560000 = 5.6 \times 10^5$   
 $a = 5$

68.  $36 = 60\% \times 60$   
 Ans = 60%

69.  $3x - 13 = -\frac{1}{2}x + 1$   
 $3\frac{1}{2}x = 14$   
 $x = 4$

70.  $\frac{\frac{9}{4}}{\frac{5}{3}} = \frac{27}{20} = 27/20$

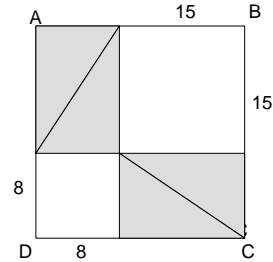
71.  $168 = 24 \times 7$   
 $312 = 24 \times 13$   
 GCD = 24

72. 3250

73.  $9^2 \cdot 3^4 = 9^2 \times 9^2 = 9^4$   
 $\square = 4$

74.  $2 \times \text{area}(\triangle ABC)$   
 $= 6 \times 12.5 = 10 \times 7.5$   
 $BC = 7.5$   
 perimeter  
 $= 10 + 7.5 + 12.5 = 30 \text{ cm}$

75. Method I)



Merge the triangles to form two rectangles as the above. The remaining region is left with two separate squares. The combined area is  $8^2 + 15^2 = 289$ .

Method II)

$\text{area}(\square ABCD) = 23^2 = 529$   
 $\text{area}(\triangle AEH) = \frac{1}{2}(8)(15) = 60$   
 $529 - 4 \times 60 = 289$

76.  $20 \times (15 + 10) + 10 \times 6 = 560 \text{ in}^2$

77.  $3 \times 3 + 2 = 11$   
 $11 \times 12 = 132 \text{ in}$

78.  $9.45 \div 3 = \$3.15$

79.  $60^\circ$

80.  $8\% \times 12,000 = 8 \times 120 = 960$   
 $960 \times 2 = \$1,920$