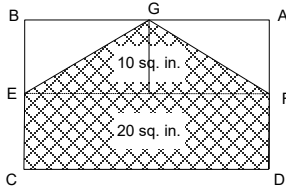


Answer Key

- | | |
|---|---|
| 1. 11 | 32. 42000 |
| 2. 18 | 33. 72 |
| 3. 25 | 34. 72000 |
| 4. 13 | 35. 48 |
| 5. 27 | 36. 4 |
| 6. 141 | 37. 1/5 |
| 7. 115 | 38. 2 |
| 8. 134 | 39. 361 |
| 9. 217 | 40. 1/64 |
| 10. 235 | 41. $3\frac{1}{7}$ |
| 11. 2 | 42. $1\frac{2}{7}$ |
| 20 | 43. 2/5 |
| 2 | 44. 7/20 |
| 200 | 45. $3\frac{4}{7}$ |
| 12. 3 | 46. $3\frac{1}{8}$ |
| 30 | 47. $1\frac{3}{8}$ |
| 3 | 48. $3\frac{4}{5}$ |
| 300 | 49. $2\frac{5}{8}$ |
| 13. 5 | 50. 2/5 |
| 50 | 51. $20 \times 3 - 12 - 15 = \boxed{33}$ |
| 5 | 52. $\begin{array}{r} 4 + 1\frac{5}{8} = 1\frac{5}{8} \\ - 4 + \frac{1}{3} \quad - \frac{1}{3} = 1\frac{7}{24} \\ \hline \end{array}$ |
| 500 | 53. 64 |
| 14. 7 | 54. 5:10 A.M. - 9:40 P.M. |
| 70 | = 5:10 - 9:40 + 12:00 (next day) |
| 7 | = 17:10 - 9:40 |
| 70 | = 7:30 |
| 15. 2 | = 7 hr & 30 min |
| 20 | 55. $\frac{3}{7} = \frac{9}{21} = \frac{12}{28}$ |
| 2 | $9 + 28 = \boxed{37}$ |
| 20 | 56. 93 |
| 16. 2 in (A) & 3 in (B) & 4 in (C) & 3 in (D) | 57. $\frac{5}{8} = 5/8$ |
| 17. 3 in (A) & 2 in (B) & 2 in (C) & 3 in (D) | 58. $72000 \div 6 + 600 \div 2 + 900 \div 20$ |
| 18. 5 in (A) & 2 in (B) & 4 in (C) & 3 in (D) | = 12000 + 300 + 45 |
| 19. 4 in (A) & 3 in (B) & 2 in (C) & 5 in (D) | = $\boxed{12345}$ |
| 20. 2 in (A) & 3 in (B) & 3 in (C) & 2 in (D) | 59. $36 \div 4 = 9$ |
| 21. 1/3 | $9 \div 3 = 3$ in (each side of a square) |
| 22. 8/3 | $3 \times 3 \times 5 = \boxed{45 \text{ in}^2}$ |
| 23. 5/4 | |
| 24. 23/5 | |
| 25. 23/3 | |
| 26. 37/5 | |
| 27. 4 11/25 | |
| 28. 5 3/20 | |
| 29. 6 16/25 | |
| 30. 7 9/20 | |
| 31. 42 | |

MAP 255 (T2) Issue 1

60. D
 $20 + \frac{1}{2}(40) = 30$



61. $100 \div 0.8 = 125$
 $125 - 100 = \boxed{\$25}$

62. 9

63. $13 - 5 = 8$ (length)
 $8 - 2 - 2 = 4$ (width)
 $8 \times 4 = 32 \text{ m}^2$ (area)

64. 150

65. $30\frac{3}{4} - 12\frac{5}{8} = 18\frac{1}{8} = 18 \frac{1}{8}$ pounds

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

67. $60 \div 4 = 15$
 $15 \times 3 = \boxed{45}$

68. $14:15 - 8:55 = 5:20$
 $(5 \text{ hr } 20 \text{ min}) \div 4 = \boxed{1 \text{ hr } \& \text{ } 20 \text{ min}}$

69. $90 + 73 + 80 = 243$
 $243 \div 3 = \boxed{81}$

70. $85 \times 4 = 340$
 $340 - 243 = \boxed{97}$

Answer Key

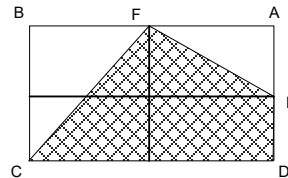
1. 11
2. 13
3. 11
4. 19
5. 32
6. 27
7. 36
8. 36
9. 146
10. 113
11. 6
60
6
60
12. 7
70
7
70
13. 8
80
8
80
14. 9
90
9
90
15. 4
40
4
400
16. .012
17. .12
18. .01
19. .008
20. .04
21. .006
22. .1
23. .008
24. .0008
25. .01
26. 0
27. 25
28. 9
29. 1
30. 7

31. $\frac{11}{28}$
LCD = 28
32. $\frac{5}{12}$
LCD = 12
33. $\frac{5}{24}$
LCD = 24
34. $\frac{9}{20}$
LCD = 20
35. $\frac{17}{144}$
LCD = 144
36. 33
37. 15
38. 33
39. 64
40. 14
41. 100
42. 42
43. 44
44. 24
45. 40
46. $3 \times 18 - 25 = \boxed{29}$
47. $\frac{7}{24} = 7/24$
48. 2
49. 1 hr & 30 min
50. $\frac{9}{14} = 9/14$
51. 240000
52. 70
53. 240
54. $3200 \div 5\frac{1}{3} = \boxed{600 \text{ mph}}$
55. C

The area of the shaded region is 15 square inches, which

$$\frac{1}{2} + \frac{1}{8} = \frac{5}{8} \text{ of the area of ABCD.}$$

So, the area(ABCD) = 24 square inches.



MAP 255 (T2) Issue 2

56. There are 4 girls and 3 boys. From Alan's eyes, there are 2 boys, so the girls are twice the number of the boys. From Betty's eyes, there 3 girls, so there are the same number of girls and boys. $3 + 4 = \boxed{7}$
57. $11.50 - 2 \times 3.50 = 4.50$
 $4.50 \div 3 = \boxed{\$1.50}$
58. $20 \times 20 \times 2 - 10 \times 10$
 $= 800 - 100$
 $= \boxed{700 \text{ in}^2}$
59. $800 = 2 \times 400$
 $400 = 20 \times 20$
radius = 20
 $2 \times 20 = 40 \text{ cm (diameter)}$
60. $1\frac{3}{4} \times 4 \times 3 = 21 \text{ hours}$
61. $\frac{1}{4} \times 10 = 2.5$
 $2.5 + 2.25 = 4.75$
 $10 - 4.75 = \boxed{5.25}$
62. 5
 $114 \div 2 = 57$
 $285 \div 57 = \boxed{5}$
63. $5 - 4 = 1$
 $1 \div 4 = \frac{1}{4}$
 $60 \times \frac{1}{4} = \boxed{15}$
64. $300 - 60 = 240$
 $240 \div 5 = \boxed{\$48.00}$
- | | | |
|---|----|----|
| 2 | 24 | 64 |
| 2 | 12 | 32 |
| 2 | 6 | 16 |
| | 3 | 8 |
65. $2 \times 2 \times 2 = \boxed{8}$
66. 5 in (A) & 2 in (B) & 6 in (C) & 2 in (D)
67. 4 in (A) & 3 in (B) & 2 in (C) & 5 in (D)
68. 3 in (A) & 5 in (B) & 3 in (C) & 4 in (D)
69. 4 in (A) & 2 in (B) & 2 in (C) & 7 in (D)
70. 3 in (A) & 4 in (B) & 3 in (C) & 2 in (D)

Answer Key

- | | |
|------------|---|
| 1. 12 | 32. 6 |
| 2. 14 | 33. 7 |
| 3. 15 | 34. $8/125$ |
| 4. 38 | 35. $1/32$ |
| 5. 36 | 36. $3\frac{4}{9}$ |
| 6. 43 | 37. $1/3$ |
| 7. 41 | 38. $1\frac{5}{7}$ |
| 8. 42 | 39. $7/20$ |
| 9. 158 | 40. $8/25$ |
| 10. 188 | 41. $2\frac{5}{8}$ |
| 11. 6 | 42. $5/7$ |
| 60 | 43. $9/10$ |
| 6 | 44. $3\frac{4}{9}$ |
| 600 | 45. $3\frac{7}{8}$ |
| 12. 7 | 46. 15 |
| 70 | 47. $100 - 98 + 66 - 64 + 2 = 6$ |
| 7 | 48. 5 |
| 700 | 49. $\frac{13}{15} = 13/15$ |
| 13. 8 | 50. $10\frac{5}{24} = 10\frac{5}{24}$ |
| 80 | 51. 286 |
| 8 | 52. 25 |
| 80 | 53. $12 = 4 \times 3$ |
| 14. 2 | $15 = 5 \times 3$ |
| 20 | The least common multiple is $3 \times 4 \times 5 = 60$ |
| 2 | 54. $1 - 75\% = 25\%$ |
| 20 | $200 \times 25\% = 50$ acres |
| 15. 3 | 55. $20 \times \frac{1}{5} = 4$ |
| 30 | $20 + 4 = 24$ |
| 3 | 56. 6:15 P.M. - 6:30 A.M. |
| 300 | $= 18:15 - 6:30$ |
| 16. 1.2 | $= 11\frac{3}{4} = 11\frac{3}{4}$ hr |
| 17. 12 | 57. $330 \div 40 = 8R10$ |
| 18. 100 | Ans = 9 boxes |
| 19. 80 | 58. D |
| 20. 4 | 1 square yard = 9 sq. ft. |
| 21. 121 | 59. 80 |
| 22. 144 | |
| 23. 169 | |
| 24. $1/16$ | |
| 25. .008 | |
| 26. $1/2$ | |
| 27. $2/5$ | |
| 28. $1/8$ | |
| 29. $2/3$ | |
| 30. $2/5$ | |
| 31. $1/2$ | |

MAP 255 (T2) Issue 3

60. There are two methods to find the radius.
 Method I)
 $60 \div 2 = 30$
 $30 = 10 + 20$
 radius = 10
 AB = 20
 Method II)
 $2(1 + 2) = 6$
 $60 \div 6 = 10$ (radius)
- $10^2\pi = 100\pi = 314$
 $2 \times 314 = \boxed{628 \text{ cm}^2}$
61. \$95
62. $3 \times 0.8 + 2 \times 0.95 + 2.5$
 $= 2.4 + 1.9 + 2.5$
 $= 6.8$
 $10 - 6.8 = \$3.20$
63. $64 = 8 \times 8$
 $4 \times 8 = \boxed{32 \text{ in}}$
64. 12 (cups)
65. $3.50 - 0.25 = \boxed{3.25}$
66. $\frac{3}{2} = 3/2$
67. $\frac{2}{5} = 2/5$
68. $\frac{1}{4} = 1/4$
69. A = 12
70. $\frac{3}{8} \times 24 = 9$
71. 0.06
72. 18
73. 500
74. $120 \div 2 = 60$
 $60 \div 3 = 20$ (width)
 $20 \times 2 = 40$ (length)
 $20 \div 2 = 10$ (radius)
 $10^2\pi = 314$
 $2 \times 314 = 628$ (two circles)
 $20 \times 40 = 800$
 $800 - 628 = \boxed{172}$
75. $10 - 6 = 4$ (height)
 $4 \times 6 = 24 \text{ in}^2$
76. $60 \div 2 = 30$
 $30 - 20 = 10$
 $20 \times 10 = \boxed{200 \text{ in}^2}$
77. 12×25000
 $= 3 \times 4 \times 25000$
 $= 3 \times 100000$
 $= \boxed{300,000}$
78. B
79. 3.25
80. $120 \div 12 = 10$
 $2(12 + 10) = \boxed{44 \text{ ft}}$
81. $40 \times 12.25 = 490$
82. $195 \div 32\frac{1}{2}$
 $= 195 \div 32.5$
 $= \boxed{\$60 \text{ per hour}}$
83. $360 \div 60 = \boxed{6}$
84. $20 \times 3 \times 2 = \$120$
85. 1, 2, 3, 4, 6, and 12 are the factors of 12. Their sum is
 $1 + 2 + 3 + 4 + 6 + 12$
 $= 28$
86. 2 in (A) & 3 in (B) & 2 in (C) & 5 in (D)
87. 2 in (A) & 5 in (B) & 4 in (C) & 3 in (D)
88. 3 in (A) & 2 in (B) & 8 in (C) & 3 in (D)
89. 5 in (A) & 3 in (B) & 6 in (C) & 5 in (D)
90. 4 in (A) & 3 in (B) & 5 in (C) & 4 in (D)