

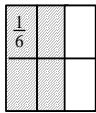
Answer Key

1. $\frac{1}{3}$
2. $\frac{2}{3}$
3. $\frac{1}{2}$
4. $\frac{1}{4}$
5. $\frac{3}{4}$
6. $\frac{2}{5}$
7. $\frac{1}{8}$
8. $\frac{1}{4}$
9. $\frac{3}{8}$
10. $\frac{5}{8}$
11. $\frac{1}{2}$
12. $\frac{2}{5}$
13. $\frac{1}{5}$
14. $\frac{1}{2}$
15. $\frac{1}{5}$
16. $\frac{1}{4}$
17. $\frac{1}{3}$
18. $\frac{1}{6}$
19. $\frac{1}{5}$
20. $\frac{1}{4}$
21. $\square = 2$



As you can see, two $\frac{1}{4}$'s make the same as $\frac{1}{2}$, so we can conclude that $\frac{1}{2} = \frac{2}{4}$.

22. $\square = 4$



Four $\frac{1}{6}$'s make the same as $\frac{2}{3}$, we can conclude:

23. $\frac{2}{3} = \frac{4}{6}$
 $\square = 4$
24. $\frac{2}{3} = \frac{6}{9}$
 $\square = 1$
25. $\frac{3}{5} = \frac{6}{10}$
 $\square = 3$
26. $\frac{2}{3} = \frac{6}{9}$
 $\square = 2$

$$27. \frac{1}{2} = \frac{4}{8}$$

$$\square = 1$$

$$28. \frac{1}{2} = \frac{3}{6} \quad \square = 3$$

$$29. \frac{6}{10} \quad \square = 6$$

$$30. \frac{1}{3} = \frac{3}{9} \quad \square = 3$$

$$31. \frac{3}{4} = \frac{9}{12} \quad \square = 9$$

$$32. \frac{1}{8} = \frac{3}{24} \quad \square = 3$$

$$33. \frac{[a]}{6} = \begin{array}{ccc} \times 2 & & \times 4 \\ \leftarrow & \frac{1}{3} & \rightarrow \\ \times 2 & & \times 4 \end{array} = \frac{4}{[b]}$$

$$3 \times 2 = 6, \text{ so } 1 \times 2 = \underline{2} = a$$

$$1 \times 4 = 4, \text{ so } 3 \times 4 = \underline{12} = b$$

$$34. \frac{[a]}{8} = \begin{array}{ccc} \times 2 & & \times 6 \\ \leftarrow & \frac{3}{4} & \rightarrow \\ \times 2 & & \times 6 \end{array} = \frac{18}{[b]}$$

$$4 \times 2 = 8, \text{ so } 3 \times 2 = \underline{6} = a$$

$$3 \times 6 = 18, \text{ so } 4 \times 6 = \underline{24} = b$$

35. 5
36. 8
37. 11
38. 2
39. 8
40. 59
41. 17
42. 60
43. 40
44. 30
45. 20
46. 200
47. 7
48. 480
49. 64
50. 300
51. 525
52. 675
53. 744
54. 816
55. 15

MAP 230 (T2) Issue 5

56. 30

57. 4

58. 11

59. 18

60. 4

61. 6

62. 1

63. 10

64. 12

65. $212 + 189 = 401$

66. $490 + 440 + 510 = 1440$
 $1440 \div 3 = 480$

67. $85 - 67 = 18$

68. $292 - 208 = 84$ (yd)

69. $50 - 37 = 13$

70. $3 \times 15 = 45$

71. $7 \times 50 = 350$

72. $21 \times 7 = 147$

73. $4 \times 12 = 48$

74. $12 \times 4 = 48$

75. $1 + 5 = 6$

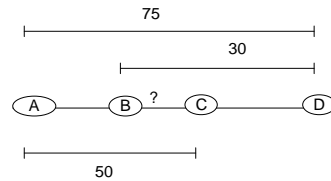
76. ~~1078095~~2043600
 Erase 1, 7, 8, 9, and 5.
 So, it becomes
~~00~~2043600
 Ans = 17895

77. $6 + 2 = 8$

78. $13 + 19 = 32$
 $36 - 32 = 4$

79. 20123

80. $50 + 30 - 75 = 5$



81. To ensure equal sum among 3 neighbors, the sequence has to follow the pattern:

9, 6, 12, 9, 6, 12, ...

Ans = 9

3	10	6	9	8	36
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4	2	7	1	16	30
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82.

top row sum = 36

bottom sum = 30

The difference is 6.

$6 \div 2 = 3$

$10 - 7 = 3$

Swapping them will zero the difference.

3	7	6	9	8	33
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4	2	10	1	16	33
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$10 + 7 = 17$