Unit 5: FRACTIONS

Examples:

1. Convert $\frac{16}{7}$ into a mixed number.

$$\frac{16}{7} = \frac{14}{7} + \frac{2}{7} = 2 + \frac{2}{7} = \underline{2\frac{2}{7}}$$

2. Convert $4\frac{5}{9}$ into an improper fraction.

$$4\frac{5}{9} = \frac{36}{9} + \frac{5}{9} = \underline{\frac{41}{9}}$$

3. What is the sum of $\frac{2}{3}$ and $\frac{8}{9}$? Write your answer in its simplest form.

$$\frac{2^{\times 3}}{3^{\times 3}} + \frac{8}{9} = \frac{6}{9} + \frac{8}{9} = \frac{14}{9} = \underline{1\frac{5}{9}}$$

4. Find the value of $\frac{1}{3}$ of 72.

$$\frac{1}{\cancel{3}_{1}} \times \cancel{72}^{24} = \underline{24}$$

Write the correct mixed number on the lines.

1. $3 + \frac{1}{2} =$ _____

2. $6 + \frac{2}{3} =$ _____

3. $5 + \frac{1}{4} =$ _____

4. $9 + \frac{1}{12} =$ _____

5. $7 + \frac{5}{7} =$ _____

6. $\frac{5}{8} + 4 =$ _____

7. $\frac{4}{9} + 1 =$ _____

8. $\frac{3}{5} + 2 =$ _____

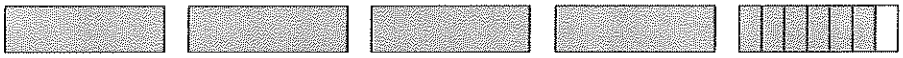
9. $\frac{1}{6} + 8 =$ _____

10. $\frac{9}{11} + 3 =$ _____

Fill in each blank with the correct answer.

11. 

_____ wholes and _____ fifths = _____

12. 

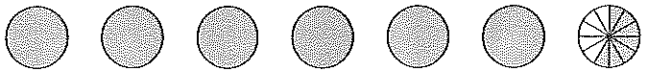
_____ wholes and _____ sevenths = _____

13. 

_____ wholes and _____ eighths = _____

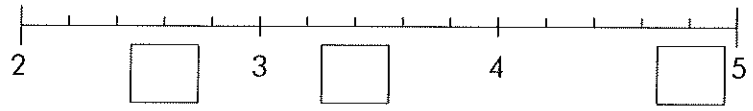
14. 

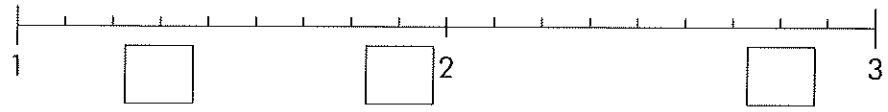
_____ wholes and _____ sixth = _____

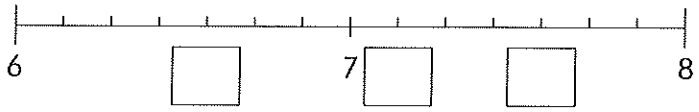
15. 

_____ wholes and _____ twelfths = _____

For each number line, write the correct mixed number in each box.

16. 

17. 

18. 

Fill in each blank with the correct answer.

19. $2 =$ _____ halves

20. $3\frac{1}{3} =$ _____ thirds

21. $5\frac{7}{11} =$ _____ elevenths

22. $1\frac{9}{12} =$ _____ twelfths

23. $8\frac{5}{7} =$ _____ sevenths

24. There are _____ quarters in $4\frac{3}{4}$.

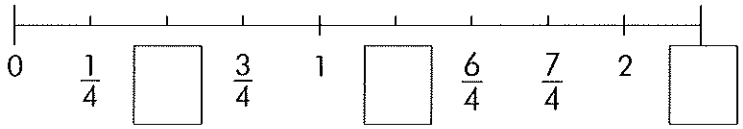
25. There are _____ sixths in $1\frac{5}{6}$.

26. There are _____ eighths in $9\frac{3}{8}$.

27. There are _____ tenths in $6\frac{7}{10}$.

For each number line, write the correct improper fraction in each box. Write each improper fraction in its simplest form.

28.



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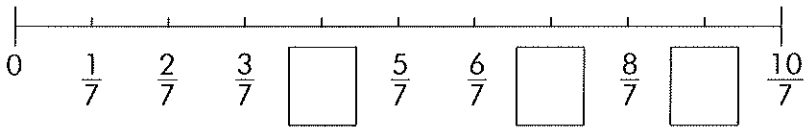
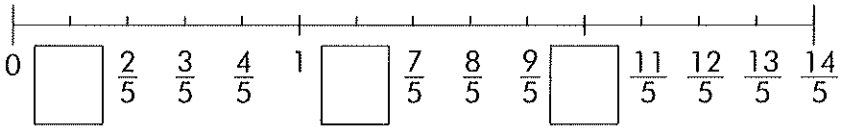


30.



Write each mixed number as an improper fraction.

31. $1\frac{1}{2} =$

32. $1\frac{3}{10} =$

33. $2\frac{3}{4} =$

34. $4\frac{3}{5} =$

35. $7\frac{1}{6} =$

36. $8\frac{2}{3} =$

37. $3\frac{5}{8} =$

38. $3\frac{7}{12} =$

39. $8\frac{4}{9} =$

40. $2\frac{4}{7} =$

Write each improper fraction as a mixed number.

41. $\frac{11}{2} =$

42. $\frac{9}{4} =$

43. $\frac{5}{5} =$

44. $\frac{16}{2} =$

45. $\frac{37}{5} =$

46. $\frac{12}{3} =$

47. $\frac{15}{8} =$

48. $\frac{17}{6} =$

49. $\frac{23}{6} =$

50. $\frac{38}{9} =$

Add these fractions. Write each answer in its simplest form.

51. $\frac{2}{5} + \frac{4}{5} =$

52. $\frac{2}{3} + \frac{4}{9} =$

53. $\frac{3}{7} + \frac{13}{14} =$

54. $\frac{5}{8} + \frac{3}{4} =$

55. $\frac{7}{12} + \frac{2}{6} + \frac{9}{12} =$

56. $\frac{1}{2} + \frac{3}{10} + \frac{9}{10} =$

57. $\frac{2}{4} + \frac{7}{8} + \frac{1}{4} =$

58. $\frac{1}{3} + \frac{3}{9} + \frac{5}{9} =$

Subtract these fractions. Write each answer in its simplest form.

59. $6 - \frac{2}{8} =$

60. $10 - \frac{5}{12} =$

61. $\frac{8}{9} - \frac{2}{9} =$

62. $\frac{9}{10} - \frac{1}{2} =$

63. $2\frac{6}{9} - \frac{1}{3} =$

64. $4\frac{9}{12} - \frac{2}{4} =$

65. $5\frac{7}{12} - \frac{1}{4} =$

66. $7 - \frac{9}{10} - \frac{2}{5} =$

Solve the problems below.

67. $\frac{2}{3}$ of 21 =

68. $\frac{1}{8}$ of 72 =

69. $\frac{5}{9}$ of 81 =

70. $\frac{4}{5}$ of 65 =

71. $\frac{9}{10}$ of 20 =

72. $\frac{5}{6} \times 48 =$

73. $\frac{3}{7} \times 63 =$

74. $\frac{3}{4} \times 52 =$

75. $\frac{4}{9} \times 27 =$

76. $\frac{1}{6} \times 84 =$

Solve the following story problems. Show your work in the space below.

77. Judi baked a cake. She gave $\frac{3}{8}$ of it to her neighbor. What fraction of the cake did she have left?

78. An empty can has a mass of $\frac{1}{6}$ lb. When it is filled with sand, it has a mass of $\frac{7}{12}$ lb. Find the mass of the sand in the can.

79. What is the total mass of three boxes if Box A has a mass of $\frac{5}{6}$ kg, Box B has a mass of $\frac{1}{10}$ kg, and Box C has a mass of $\frac{9}{10}$ kg?

80. After cutting a length of ribbon and giving $\frac{5}{12}$ m of ribbon to her daughter, Mrs. Kwan had $\frac{1}{4}$ m of ribbon left. If she had $\frac{11}{12}$ m of ribbon in the beginning, what was the length of ribbon Mrs. Kwan cut?

81. Maggie, Joyce, and Lina each prepared different amounts of fruit punch for a party. Maggie prepared $\frac{5}{9}$ L of fruit punch and Joyce prepared $\frac{1}{3}$ L of fruit punch. If they had prepared a total of $1\frac{2}{3}$ L of fruit punch, how much fruit punch did Lina prepare?

82. Eduardo drank $\frac{6}{10}$ L of milk. Viktor drank $\frac{1}{2}$ L of milk less than Eduardo. How much milk did the two children drink in all?

83. Mrs. Nguyen bought 5 L of cooking oil. She used $\frac{1}{4}$ L of cooking oil on Monday. She used $\frac{1}{8}$ L of cooking oil on Tuesday. How much cooking oil did she have left?

84. In a race, Carla ran $\frac{3}{4}$ km and swam $\frac{3}{8}$ km. She biked the rest of the race. If she traveled $12\frac{7}{8}$ km altogether, how far did she bike?

85. There are 16 red beads, 24 green beads, and 20 blue beads in a box. What fraction of the beads in the box are blue?

86. The distance from Town A to Town B is 18 miles. Luke starts his journey from Town A and travels $\frac{1}{6}$ of the total distance. How much further does he have to travel in order to reach Town B?

87. There were 32 chocolates in a box. After eating some chocolates, Tara found that she had $\frac{5}{8}$ of the chocolates left. How many chocolates did Tara eat?

88. Farmer Bill had 28 chickens, 15 ducks, and 7 turkeys. He sold $\frac{4}{5}$ of the birds.

(a) How many birds did he sell in all?

(b) If he sold 12 chickens, what fraction of the chickens were left?

89. 568 people watched a concert. $\frac{5}{8}$ of the audience were women, while $\frac{1}{4}$ of them were men. How many children were there at the concert?

90. Isabel received a sum of money. She gave $\frac{1}{3}$ of the money to her brother. If she had $60 left, how much money did Isabel receive?