

Fraction Practice Problems

$$1. \frac{5}{16} + \frac{7}{16} \\ = \frac{12}{16} = \frac{3}{4}$$

$$2. \frac{7}{9} + \frac{7}{12} = \frac{28}{36} + \frac{21}{36} \\ = \frac{49}{36} = 1\frac{13}{36}$$

$$3. 4\frac{2}{9} + 5\frac{1}{4} \\ = 4\frac{8}{36} + 5\frac{9}{36} \\ = 9\frac{17}{36}$$

$$4. \frac{4}{7} - \frac{3}{7} \\ = \frac{1}{7}$$

$$5. \frac{7}{8} - \frac{5}{6} \\ = \frac{21}{24} - \frac{20}{24} = \frac{1}{24}$$

$$6. 5\frac{2}{3} - 2\frac{1}{4} \\ = 5\frac{8}{12} - 2\frac{3}{12} \\ = 3\frac{5}{12}$$

$$7. 7\frac{1}{4} - 1\frac{5}{6} \\ = 7\frac{3}{12} - 1\frac{10}{12} \\ = 6\frac{15}{12} - 1\frac{10}{12} = 5\frac{5}{12}$$

$$8. \frac{1}{13} \times \frac{39}{56} = \frac{3}{8}$$

$$9. 2\frac{1}{2} \times 1\frac{3}{5} \\ = \frac{5}{2} \cdot \frac{8}{5} = 4$$

$$10. \frac{7}{9} \div \frac{35}{36} \\ = \frac{7}{9} \cdot \frac{36}{35} = \frac{4}{5}$$

$$11. 4\frac{1}{5} \div 2\frac{1}{4} \\ = \frac{21}{5} \div \frac{9}{4} \\ = \frac{21}{5} \cdot \frac{4}{9} = \frac{28}{15} = 1\frac{13}{15}$$

$$12. \frac{5}{14} + \frac{2}{14} \\ = \frac{7}{14} = \frac{1}{2}$$

$$13. \frac{5}{8} + \frac{1}{6} \\ = \frac{15}{24} + \frac{4}{24} = \frac{19}{24}$$

$$14. 6\frac{3}{7} + 5\frac{3}{4} \\ = 6\frac{12}{28} + 5\frac{21}{28} \\ = 11\frac{33}{28} = 12\frac{5}{28}$$

$$15. \frac{5}{12} - \frac{1}{12} \\ = \frac{4}{12} = \frac{1}{3}$$

$$16. \frac{7}{8} - \frac{5}{12} \\ = \frac{21}{24} - \frac{10}{24} = \frac{11}{24}$$

$$17. 6\frac{11}{15} - 3\frac{1}{9} \\ = 6\frac{33}{45} - 3\frac{5}{45} \\ = 3\frac{28}{45}$$

$$18. 6\frac{1}{9} - 2\frac{5}{6} \\ = 6\frac{2}{18} - 2\frac{15}{18} \\ = 5\frac{20}{18} - 2\frac{15}{18} = 3\frac{5}{18}$$

$$19. \frac{11}{12} \times \frac{21}{44} \\ = \frac{7}{16}$$

$$20. 2\frac{5}{6} \times 3\frac{4}{5} \\ = \frac{17}{6} \cdot \frac{19}{5} = \frac{323}{30} \\ = 10\frac{23}{30}$$

$$21. \frac{7}{8} \div \frac{35}{44} \\ = \frac{7}{8} \cdot \frac{44}{35} \\ = \frac{11}{10} = 1\frac{1}{10}$$

$$22. 4\frac{3}{7} \div 2\frac{1}{3} \\ = \frac{31}{7} \div \frac{7}{3} \\ = \frac{31}{7} \cdot \frac{3}{7} = \frac{93}{49} = 1\frac{44}{49}$$

$$23. \frac{7}{16} + \frac{3}{16} \\ = \frac{10}{16} = \frac{5}{8}$$

$$24. \frac{7}{12} + \frac{4}{15} \\ = \frac{35}{60} + \frac{16}{60} \\ = \frac{51}{60}$$

$$25. 5\frac{3}{7} + 2\frac{3}{4} \\ = 5\frac{12}{28} + 2\frac{21}{28} \\ = 7\frac{33}{28} = 8\frac{5}{28}$$

$$26. \frac{12}{17} - \frac{5}{17} \\ = \frac{7}{17}$$

$$27. \frac{7}{9} - \frac{5}{12} \\ = \frac{28}{36} - \frac{15}{36} \\ = \frac{13}{36}$$

$$28. 8\frac{2}{3} - 5\frac{1}{2} \\ = 8\frac{4}{6} - 5\frac{3}{6} \\ = 3\frac{1}{6}$$

$$29. 6\frac{1}{7} - 4\frac{3}{5}$$

$$= 6\frac{5}{35} - 4\frac{21}{35}$$

$$= 5\frac{40}{35} - 4\frac{21}{35} = 1\frac{9}{35}$$

$$30. \frac{5}{7} \times \frac{21}{35} = \frac{3}{7}$$

$$31. 3\frac{5}{6} \times 2\frac{4}{7}$$

$$= \frac{23}{6} \cdot \frac{18}{7}$$

$$= \frac{69}{7} = 9\frac{6}{7}$$

$$32. \frac{8}{9} \div \frac{16}{45}$$

$$= \frac{8}{9} \cdot \frac{45}{16}$$

$$= \frac{5}{2} = 2\frac{1}{2}$$

$$33. 2\frac{4}{5} \div 5\frac{1}{3}$$

$$= \frac{14}{5} \div \frac{16}{5}$$

$$= \frac{14}{5} \cdot \frac{5}{16} = \frac{7}{8}$$

$$34. \frac{5}{18} + \frac{7}{18}$$

$$= \frac{12}{18} = \frac{2}{3}$$

$$35. \frac{3}{8} + \frac{5}{12}$$

$$= \frac{9}{24} + \frac{10}{24}$$

$$= \frac{19}{24}$$

$$36. 2\frac{3}{4} + 9\frac{5}{6}$$

$$= 2\frac{9}{12} + 9\frac{10}{12}$$

$$= 11\frac{19}{12} = 12\frac{7}{12}$$

$$37. \frac{7}{15} - \frac{2}{15}$$

$$= \frac{5}{15} = \frac{1}{3}$$

$$38. \frac{9}{10} - \frac{7}{15}$$

$$= \frac{27}{30} - \frac{14}{30}$$

$$= \frac{13}{30}$$

$$39. 8\frac{5}{8} - 5\frac{5}{16}$$

$$= 8\frac{10}{16} - 5\frac{5}{16}$$

$$= 3\frac{5}{16}$$

$$40. 7\frac{1}{5} - 4\frac{3}{7}$$

$$= 7\frac{7}{35} - 4\frac{15}{35}$$

$$= 6\frac{42}{35} - 4\frac{15}{35} = 2\frac{27}{35}$$

$$41. \frac{7}{12} \times \frac{30}{49}$$

$$= \frac{5}{14}$$

$$42. 4\frac{2}{7} \times 5\frac{3}{8}$$

$$= \frac{30}{7} \cdot \frac{43}{8}$$

$$= \frac{645}{28} = 23\frac{1}{28}$$

$$43. \frac{5}{7} \div \frac{25}{42}$$

$$= \frac{5}{7} \cdot \frac{42}{25}$$

$$= \frac{6}{5} = 1\frac{1}{5}$$

$$44. 3\frac{4}{7} \div 2\frac{1}{2}$$

$$= \frac{25}{7} \div \frac{5}{2}$$

$$= \frac{25}{7} \cdot \frac{2}{5} = \frac{10}{7} = 1\frac{3}{7}$$

$$45. \frac{9}{23} + \frac{4}{23}$$

$$= \frac{13}{23}$$

$$46. \frac{7}{18} + \frac{4}{21}$$

$$= \frac{49}{126} + \frac{24}{126}$$

$$= \frac{73}{126}$$

$$47. 7\frac{11}{13} + 4\frac{7}{26}$$

$$= 7\frac{22}{26} + 4\frac{7}{26}$$

$$= 11\frac{29}{26} = 12\frac{3}{26}$$

$$48. \frac{19}{24} - \frac{7}{24}$$

$$= \frac{12}{24} = \frac{1}{2}$$

$$49. \frac{11}{12} - \frac{7}{15}$$

$$= \frac{55}{60} - \frac{28}{60}$$

$$= \frac{27}{60} = \frac{9}{20}$$

$$50. 3\frac{4}{17} - 1\frac{3}{34}$$

$$= 3\frac{8}{34} - 1\frac{3}{34}$$

$$= 2\frac{5}{34}$$

$$51. 7\frac{2}{9} - 3\frac{3}{4}$$

$$= 7\frac{8}{36} - 3\frac{27}{36}$$

$$= 6\frac{44}{36} - 3\frac{27}{36} = 3\frac{17}{36}$$

$$52. \frac{18}{35} \times \frac{14}{27}$$

$$= \frac{4}{15}$$

$$53. 3\frac{3}{10} \times 2\frac{1}{12}$$

$$= \frac{33}{10} \cdot \frac{25}{12}$$

$$= \frac{55}{8} = 6\frac{7}{8}$$

$$54. \frac{3}{11} \div \frac{12}{55}$$

$$= \frac{3}{11} \cdot \frac{55}{12}$$

$$= \frac{5}{4} = 1\frac{1}{4}$$

$$55. 2\frac{1}{6} \div 3\frac{1}{4}$$

$$= \frac{13}{6} \div \frac{13}{4}$$

$$= \frac{13}{6} \cdot \frac{4}{13} = \frac{2}{3}$$

Percent Practice Problems

1. 0.9% of 870

$$\begin{array}{r} 870 \\ 0.009 \\ \hline 7.830 \end{array}$$

7.83

2. 37½% of 4800

$$\frac{3}{8} \cdot \frac{4800}{1} = 1800$$

3. 460% of 700

$$\begin{array}{r} 470 \\ \times 7 \\ \hline 3290 \end{array}$$

3,290

4. What percent of 42 is 7?

$$n(42) = 7$$

$$n = \frac{7}{42} = \frac{1}{6} = 16\frac{2}{3}\%$$

5. What percent of 19 is 7?

$$n(19) = 7$$

$$n = \frac{7}{19}$$

36 16/19 %

$$\begin{array}{r} 0.36 \\ 19 \overline{) 7.00} \\ \underline{-57} \\ 130 \\ \underline{-114} \\ 16 \end{array}$$

6. 40% of what number is 70?

$$0.4n = 70$$

175

$$0.4 \overline{) 70.0}$$

$$\begin{array}{r} 175. \\ \underline{40} \\ 300 \\ \underline{280} \\ 200 \\ \underline{200} \\ 0 \end{array}$$

7. 21% of 650

$$\begin{array}{r} 650 \\ 0.21 \\ \hline 650 \\ 1300 \\ \hline 13650 \end{array}$$

136.5

8. 16⅔% of 2400

$$\frac{1}{6} \cdot \frac{2400}{1} = 400$$

9. 175% of 90

$$1\frac{3}{4} \cdot \frac{90}{1} = \frac{7}{4} \cdot \frac{90}{1}$$

$$= \frac{315}{2} = 157\frac{1}{2}$$

10. What percent of 30 is 21?

$$n(30) = 21$$

$$n = \frac{21}{30} = \frac{7}{10} = \frac{70}{100}$$

70%

11. What percent of 42 is 18?

$$n(42) = 18$$

$$n = \frac{18}{42} = \frac{3}{7}$$

42 6/7 %

$$\begin{array}{r} 0.42 \\ 7 \overline{) 3.00} \\ \underline{-28} \\ 20 \\ \underline{-14} \\ 6 \end{array}$$

12. 80% of what number is 60?

$$0.8n = 60$$

75

$$0.8 \overline{) 60.0}$$

$$\begin{array}{r} 75. \\ \underline{56} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

13. 0.7% of 590

$$\begin{array}{r} 590 \\ 0.007 \\ \hline 4130 \end{array}$$

4.13

14. 33⅓% of 3600

$$\frac{1}{3} \cdot \frac{3600}{1} = 1200$$

15. 140% of 30

$$\begin{array}{r} 1.4 \\ \times 30 \\ \hline 42.0 \end{array} \quad (42)$$

16. What percent of 54 is 27?

$$n(54) = 27$$

$$n = \frac{27}{54} = \frac{1}{2} \quad (50\%)$$

17. What percent of 23 is 9?

$$n(23) = 9$$

$$n = \frac{9}{23}$$

$$(39 \frac{3}{23} \%)$$

$$\begin{array}{r} 0.39 \\ 23 \overline{) 9.00} \\ \underline{-69} \\ 210 \\ \underline{-207} \\ 3 \end{array}$$

18. 90% of what number is 72?

$$0.9n = 72$$

$$(80)$$

$$\begin{array}{r} 80. \\ 0.9 \overline{) 72.0} \\ \underline{72} \\ 0 \end{array}$$

19. 6% of 380

$$\begin{array}{r} 380 \\ \times 0.06 \\ \hline 22.80 \end{array} \quad (22.8)$$

20. $83\frac{1}{3}\%$ of 5400

$$\frac{5}{6} \cdot \frac{5400}{1} = 4500$$

21. 150% of 30

$$\begin{array}{r} 1.5 \\ \times 30 \\ \hline 45.0 \end{array} \quad (45)$$

22. What percent of 16 is 14?

$$n(16) = 14$$

$$n = \frac{14}{16} = \frac{7}{8} \quad (87\frac{1}{2} \%)$$

23. What percent of 39 is 7?

$$n(39) = 7$$

$$n = \frac{7}{39}$$

$$(17 \frac{37}{39} \%)$$

$$\begin{array}{r} 0.17 \\ 39 \overline{) 7.00} \\ \underline{-39} \\ 310 \\ \underline{-273} \\ 37 \end{array}$$

24. 30% of what number is 42?

$$0.3n = 42$$

$$(140)$$

$$\begin{array}{r} 140. \\ 0.3 \overline{) 42.0} \\ \underline{3} \\ 12 \\ \underline{12} \\ 0 \end{array}$$

25. 0.8% of 630

$$\begin{array}{r} 630 \\ \times 0.008 \\ \hline 5.040 \end{array} \quad (5.04)$$

26. $32\frac{1}{2}\%$ of 5600

$$\begin{array}{r} 32.5 \\ \times 56 \\ \hline 1950 \\ 1625 \\ \hline 1820.0 \end{array} \quad (1820)$$

27. 125% of 60

$$\frac{1}{4} \cdot 60 = \frac{5}{4} \cdot \frac{15}{1} = 75$$

$$(75)$$

28. What percent of 54 is 45?

$$n(54) = 45$$

$$n = \frac{45}{54} = \frac{5}{6} \quad (83\frac{1}{3} \%)$$

29. What percent of 73 is 28?

$$n(73) = 28$$

$$n = \frac{28}{73}$$

$$(38 \frac{26}{73} \%)$$

$$\begin{array}{r} 0.38 \\ 73 \overline{) 28.00} \\ \underline{-219} \\ 610 \\ \underline{-584} \\ 26 \end{array}$$

30. 40% of what number is 76?

$$0.4n = 76$$

$$(190)$$

$$\begin{array}{r} 190. \\ 0.4 \overline{) 76.0} \\ \underline{4} \\ 36 \\ \underline{36} \\ 0 \end{array}$$