

Chapter 5

5.1 Show that the number is rational by writing it as a quotient of two integers.

1. -4 2. 0.58 3. $3\frac{5}{16}$ 4. 70

5.1 Write the fraction or mixed number as a decimal.

5. $\frac{3}{5}$ 6. $-\frac{14}{9}$ 7. $-6\frac{13}{25}$ 8. $2\frac{5}{12}$

5.1 Write the decimal as a fraction or mixed number.

9. 0.34 10. -3.78 11. 9.27 12. $0.\bar{5}$

Find the sum or difference.

- 5.2** 13. $-\frac{4}{11} + \frac{9}{11}$ 14. $\frac{7}{18} - \frac{17}{18}$ 15. $-4\frac{7}{15} - 2\frac{11}{15}$ 16. $-9\frac{1}{3} + 1\frac{2}{3}$

- 5.3** 17. $-\frac{3}{4} - \frac{2}{7}$ 18. $\frac{7}{8} + \left(-\frac{3}{16}\right)$ 19. $-3\frac{1}{6} + 6\frac{5}{22}$ 20. $5\frac{2}{9} - 7\frac{8}{15}$

5.3 Simplify the expression.

21. $\frac{w}{12} + \frac{w}{15}$ 22. $\frac{x}{21} - \frac{x}{3}$ 23. $-\frac{5z}{14} + \frac{9z}{28}$ 24. $\frac{2y}{25} - \frac{3y}{10}$

5.4 Find the product.

25. $\frac{3}{7} \cdot \frac{5}{18}$ 26. $\frac{9}{10} \left(-\frac{5}{21}\right)$ 27. $-24 \cdot \left(-\frac{7}{16}\right)$ 28. $-3\frac{1}{3} \cdot 5\frac{13}{20}$

5.5 Find the quotient.

29. $\frac{5}{16} \div \frac{35}{48}$ 30. $-\frac{11}{12} \div \frac{3}{8}$ 31. $-7\frac{49}{54} \div 5\frac{5}{6}$ 32. $-22 \div \left(-\frac{4}{11}\right)$

5.6 Solve the equation. Check your solution.

33. $\frac{6}{7}a = 18$ 34. $\frac{5}{14}c = -\frac{1}{2}$ 35. $\frac{2}{7}x - 5 = 17$ 36. $\frac{4}{9} = \frac{1}{3}x - \frac{5}{9}$

5.7 Solve the equation by first clearing the fractions or the decimals.

37. $\frac{1}{4}x + \frac{1}{6} = -\frac{5}{12}$ 38. $\frac{4}{7} = \frac{1}{8}x - 3$ 39. $6.8x + 5.3 = 7$ 40. $27.62 = 3.4x - 5.7$

5.7 Solve the inequality.

41. $-\frac{4}{5}p + 15 > \frac{3}{5}$ 42. $\frac{1}{9}m - 2 \geq \frac{2}{3}$ 43. $\frac{3}{4}z - \frac{3}{8} \leq \frac{1}{4}$ 44. $\frac{1}{2} + \frac{4}{11}y < \frac{19}{22}$