

Skills

● Lesson 1-1 Find the opposite of each number.

1. 7

2. -18

3. -4

4. -100

5. 24

Compare using $<$, $=$, or $>$.

6. $2 \blacksquare 7$

7. $-13 \blacksquare 13$

8. $-5 \blacksquare -6$

9. $21 \blacksquare -12$

● Lesson 1-2 Find each sum or difference.

10. $33 + (-17)$

11. $-12 + (-6)$

12. $82 + 10$

13. $-75 + 14$

14. $-7 - (-4)$

15. $19 - (-9)$

16. $-40 - 22$

17. $-4 - (-100)$

● Lesson 1-3 Find each product or quotient.

18. $-8 \times (-9)$

19. $30(-4)$

20. $-13 \cdot 4$

21. $(15)(-8)$

22. $48 \div (-4)$

23. $\frac{-37}{-1}$

24. $-\frac{68}{2}$

25. $\frac{98}{14}$

● Lessons 1-4, 1-5 Write each fraction as a decimal.

26. $\frac{2}{3}$

27. $\frac{3}{25}$

28. $\frac{7}{4}$

29. $\frac{7}{12}$

30. $\frac{6}{15}$

Order from greatest to least.

31. $-1, 0.15, \frac{1}{5}$

32. $\frac{3}{11}, -\frac{1}{4}, -0.1$

33. $-0.3, \frac{3}{8}, \frac{7}{20}$

● Lesson 1-6 Simplify.

34. $-\frac{7}{8} + \left(-\frac{5}{8}\right)$

35. $13.7 - 15$

36. $1\frac{1}{6} - \left(-\frac{2}{3}\right)$

37. $-4.59 + 5.49$

● Lessons 1-7, 1-8 Simplify.

38. $\left(-\frac{7}{10}\right)\left(-\frac{5}{8}\right)$

39. $25.5 \div (-0.5)$

40. $-0.17 \cdot 1.8$

41. $\frac{5}{6} \div \left(-\frac{4}{9}\right)$

Skills

- **Lesson 2-1** Evaluate each expression for $a = -2$, $b = 8$, and $c = 5$.

1. $c - b$ 2. $2b + a$ 3. $\frac{1}{2} + 2c$ 4. $\frac{b}{a}$

Write an algebraic expression for each word phrase.

5. 50 meters longer than x meters
6. driving r miles per hour for 2.5 hours
7. 42 students divided equally into t teams
8. 3 years younger than Matt's age, a

- **Lesson 2-2** Simplify each expression.

9. $2r + 7 + r$ 10. $14 - 2x - 5$ 11. $4(1.5 - 3p)$ 12. $\frac{1}{4}n + 1 + \frac{1}{2}n - 5$

- **Lesson 2-3** Use inverse operations to solve each equation.

Check your answer.

13. $t - 13 = -29$ 14. $17 + d = -7$ 15. $d + 112 = 159$ 16. $y - 68 = 94$
17. $\frac{m}{5} = -15$ 18. $-7y = -42$ 19. $0.4t = 16$ 20. $\frac{x}{12} = -8$

- **Lesson 2-4** Solve each equation using number sense.

21. $7t + 5 = 40$ 22. $2d - 12 = 18$ 23. $5w - 18 = 7$ 24. $\frac{z}{4} + 5 = 15$

- **Lesson 2-5** Solve each equation using inverse operations.

Check your answer.

25. $\frac{r}{-6} + 4 = 3$ 26. $12m + 24 = 0$ 27. $-6g - 9 = 15$ 28. $\frac{k}{-3} - 2 = -20$

- **Lesson 2-6** Use the distributive property to solve each equation.

29. $3(n + 2) = -6$ 30. $-2(4 - x) = 10.4$ 31. $\frac{1}{2}(2s + 8) = 14$

Skills

- **Lesson 4-1** Write each fraction in simplest form.

1. $\frac{20 \text{ in.}}{6 \text{ ft}}$

2. 15 min : 3 h

3. 2 kg to 500 g

- **Lesson 4-2** Find each unit rate.

4. 100 Calories in 5 crackers

5. 84 players on 7 teams

6. $\frac{1}{2}$ mi in $\frac{1}{5}$ h

7. $\frac{3}{8}$ lb in $\frac{2}{3}$ box

- **Lesson 4-3** By using cross products, tell whether the ratios can form a proportion.

8. $\frac{4}{3}, \frac{12}{9}$

9. $\frac{8}{5}, \frac{11}{7}$

10. $\frac{21}{6}, \frac{7}{2}$

11. $\frac{6}{24}, \frac{2}{4}$

12. $\frac{50}{6}, \frac{3}{2}$

- **Lesson 4-4** Solve each proportion using cross products.

13. $\frac{12}{a} = \frac{3}{5}$

14. $\frac{n}{12} = \frac{4}{16}$

15. $\frac{7}{8} = \frac{n}{4}$

16. $\frac{7}{10} = \frac{14}{a}$

17. $\frac{7}{n} = \frac{17.5}{5}$

Skills

● Lesson 5-1

Write each ratio as a percent.

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

2. $\frac{11}{5}$

3. $\frac{3}{25}$

4. $\frac{19}{20}$

5. $\frac{1}{10}$

6. $\frac{3}{2}$

Write each percent as a decimal.

7. 37.5%

8. 11.375%

9. 2.55%

10. 9%

11. 1.111%

12. 97.05%

Write each percent as a fraction in simplest form.

13. 225%

14. 0.1%

15. 0.07%

16. 398%

17. 156%

18. 0.2%

● Lesson 5-2 Write a proportion and solve.

19. 54 is what percent of 135?

20. What percent of 48 is 2.4?

21. What percent of 200 is 120?

22. 8 is what percent of 20?

23. 32.5 is what percent of 130?

24. What percent of 150 is 27?

● Lesson 5-3 Write and solve an equation to find the part of a whole.

25. 30% of 250 is what number?

26. What number is 90% of 70?

27. 45% of 200 is what number?

28. What number is 7% of 88?

29. 4% of 200 is what number?

30. What number is 22% of 1?

● Lesson 5-4 Find each payment.

31. \$75 with a 5% sales tax

32. \$219 with a 3.5% sales tax

33. \$85.65 with a 3% sales tax

● Lesson 5-5 Find the interest earned for each account.

34. deposit \$1,100; earns 5% simple interest; interest earned in 5 years

35. deposit \$2,400; earns 4.5% simple interest; interest earned in 6 years

● Lesson 5-6 Find each percent of change. Round to the nearest tenth. State whether the change is an increase or a decrease.

36. 25 to 40

37. 95 to 45

38. 108 to 110

39. 50 to 95

40. 125 to 75

41. 8.5 to 10

42. 100 to 15

43. 63.5 to 20

44. 111 to 150

45. 25.9 to 30.2