

Quiz for Lessons 1-1 Through 1-5

1-1 Variables and Expressions

Give two ways to write each algebraic expression in words.

1. $4 + n$

2. $m - 9$

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

4. $4z$

5. Bob earns \$15 per hour. Write an expression for the amount of money he earns in h hours.

6. A soccer practice is 90 minutes long. Write an expression for the number of minutes left after m minutes have elapsed.

Evaluate each expression for the replacement set $\{2, 3, 6\}$.

7. $y \div 2$

8. $3y$

9. $3 + y$

10. $3 - y$

1-2 Adding and Subtracting Real Numbers

Add or subtract.

11. $81 + (-15)$

12. $27 - 32$

13. $2 - \left(-1\frac{1}{4}\right)$

14. $-7 + (-14)$

15. Brandon's bank statement shows a balance of $-\$45.00$. What will the balance be after Brandon deposits $\$70.00$?

1-3 Multiplying and Dividing Real Numbers

Find the value of each expression if possible.

16. $9(-9)$

17. $6 \div \frac{3}{5}$

18. $9.6 \div 0$

19. $-\frac{1}{2}\left(-\frac{1}{2}\right)$

20. Simon drove for $2\frac{1}{2}$ hours to get from his house to the beach. Simon averaged 55 miles per hour on the trip. What is the distance from Simon's house to the beach?

1-4 Powers and Exponents

Simplify each expression.

21. $(-3)^2$

22. -3^2

23. $\left(-\frac{2}{3}\right)^3$

24. $\left(-\frac{1}{2}\right)^5$

25. The number of bytes in a kilobyte is 2 to the 10th power. Express this number in two ways.

1-5 Roots and Irrational Numbers

Find each root.

26. $\sqrt{225}$

27. $-\sqrt{49}$

28. $\sqrt[3]{8}$

29. $\sqrt{\frac{16}{25}}$

30. Mindy is building a patio that is in the shape of a square. The patio will cover 56 square yards. Find the length of a side of the patio to the nearest tenth of a yard.

Write all classifications that apply to each real number.

31. $\frac{1}{11}$

32. $\sqrt{12}$

33. $\sqrt{900}$

34. -6