

Check Your Understanding

= Step-by-Step Solutions begin on page R13.



Example 1 Write a verbal expression for each algebraic expression.

1. $2m$

2. $\frac{2}{3}r^4$

3. $a^2 - 18b$

Example 2 Write an algebraic expression for each verbal expression.

4. the sum of a number and 14

5. 6 less a number t

6. 7 more than 11 times a number

7. 1 minus the quotient of r and 7

8. two fifths of the square of a number j

9. n cubed increased by 5

Example 3 10. **GROCERIES** Mr. Bailey purchased some groceries that cost d dollars. He paid with a \$50 bill. Write an expression for the amount of change he will receive.

Practice and Problem Solving

Extra Practice is on page R1.

Example 1 Write a verbal expression for each algebraic expression.

11. $4q$

12. $\frac{1}{8}y$

13. $15 + r$

14. $w - 24$

15. $3x^2$

16. $\frac{r^4}{9}$

17. $2a + 6$

18. $r^4 \cdot t^3$

Example 2 Write an algebraic expression for each verbal expression.

19. x more than 7

20. a number less 35

21. 5 times a number

22. one third of a number

23. f divided by 10

24. the quotient of 45 and r

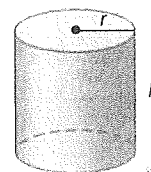
25. three times a number plus 16

26. 18 decreased by 3 times d

27. k squared minus 11

28. 20 divided by t to the fifth power

Example 3 29. **GEOMETRY** The volume of a cylinder is π times the radius r squared multiplied by the height h . Write an expression for the volume.



30. **FINANCIAL LITERACY** Jocelyn makes x dollars per hour working at the grocery store and n dollars per hour babysitting. Write an expression that describes her earnings if she babysat for 25 hours and worked at the grocery store for 15 hours.

Write a verbal expression for each algebraic expression.

31. $25 + 6x^2$

32. $6f^2 + 5f$

33. $\frac{3a^5}{2}$

34. **CCSS SENSE-MAKING** A certain smartphone family plan costs \$55 per month plus additional usage costs. If x is the number of cell phone minutes used above the plan amount and y is the number of megabytes of data used above the plan amount, interpret the following expressions.

a. $0.25x$

b. $2y$

c. $0.25x + 2y + 55$

