Skills Practice 2 - 1

Writing Equations

Translate each sentence into an equation.

- **1.** Two added to three times a number *m* is the same as 18.
- **2.** Twice *a* increased by the cube of *a* equals *b*.
- **3.** Seven less than the sum of *p* and *t* is as much as 6.
- **4.** The sum of *x* and its square is equal to *y* times *z*.
- **5.** Four times the sum of *f* and *g* is identical to six times *g*.

Translate each sentence into a formula.

- **6.** The perimeter *P* of a square equals four times the length of a side ℓ .
- **7.** The area *A* of a square is the length of a side ℓ squared.
- 8. The perimeter P of a triangle is equal to the sum of the lengths of sides a, b, and c.
- **9.** The area *A* of a circle is pi times the radius *r* squared.
- 10. The volume V of a rectangular prism equals the product of the length ℓ , the width w, and the height h.

Translate each equation into a sentence.

11.g + 10 = 3g	12. $2p + 4t = 20$
13. $4(a + b) = 9a$	14. $8 - 6x = 4 + 2x$
15. $\frac{1}{2}(f + y) = f - 5$	16. $k^2 - n^2 = 2b$

Write a problem based on the given information.

17. $c = \text{cost per pound of plain coffee beans}$	18. $p = \text{cost of dinner}$
c + 3 = cost per pound of flavored coffee beans	$0.15p = \cos t$ of a 15% tip
2c + (c + 3) = 21	p + 0.15p = 23

Lesson 2-1