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## 2-1 Skills Practice

## 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 $\ell$.
7. The area $A$ of a square is the length of a side $\ell$ 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 $\ell$, the width $w$, and the height $h$.

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

## Write a problem based on the given information.

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