$\qquad$ Date $\qquad$ Class $\qquad$

## Skills Readiness

## 58 Connect Words and Algebra

To connect words and algebra, you must understand the operations involved and how to represent them. Key words are helpful in determining the operations.

| Key Words | Operation or Representation |
| :--- | :--- |
| a number; an unknown quantity | any variable, such as $x$ or $n$ |
| Twice, three times, etc. | multiplication (2n, 3n, etc.) |
| sum; more than; increased by | addition ( + ) |
| difference; less than; decreased by | subtraction ( - ) |
| each; per | multiplication |
| is; equals | $=$ |

Example: Jared must cut 6 lawns over the weekend. Each of the lawns takes 2 hours to cut. Write an equation representing the total time $t$ to cut all 6 lawns.

Answer: Since each lawn takes 2 hours, multiply 2 times the number of lawns to get the total time: $t=6(2)$.

## Practice on Your Own

1. Write an expression that represents the quantity 5 more than a number.
2. Write a phrase that could be modeled by the expression $x-15$. $\qquad$
3. John bought 3 CDs and 2 DVDs. Each CD costs $\$ 9.95$, and each DVD costs $\$ 14.98$. Write an equation representing the total cost $C$. $\qquad$
4. A triangle has sides of length 7,10 , and $s$. Write an equation representing the perimeter $P$ of the triangle.
5. The value of a painting begins at $\$ 12,000$ and increases by $\$ 500$ per year. Write an equation representing the value $V$ of the painting at the end of any given year $y$.
6. David has 56 baseball cards of which he sells 3 cards per week. Write an equation representing the number of cards $n$ he has left at the end of any given week $w$. $\qquad$

## Check

7. Write an expression that represents a number decreased by 6.
8. Tina bought 6 plates and 2 glasses. Each plate costs $\$ 6.99$, and each glass costs $\$ 22.98$. Write an equation representing the total cost $C$. $\qquad$
9. Joseph opens a checking account with $\$ 400$. Each month he adds $\$ 150$ to the account. Write an equation representing the total amount $A$ in the account at the end of any given month $m$. $\qquad$
