

**Lesson Summary**

**VARIABLE:** A *variable* is a symbol (such as a letter) that represents a number (i.e., it is a placeholder for a number).

A variable is a placeholder for “a number” that does not “vary.”

**EXPRESSION:** An *expression* is a numerical expression or a result of replacing some (or all) of the numbers in a numerical expression with variables.

**EQUATION:** An *equation* is a statement of equality between two expressions.

If  $A$  and  $B$  are two expressions in the variable  $x$ , then  $A = B$  is an equation in the variable  $x$ .

**Problem Set**

Find the solution to each equation.

1.  $4^3 = y$

2.  $8a = 24$

3.  $32 = g - 4$

4.  $56 = j + 29$

5.  $\frac{48}{r} = 12$

6.  $k = 15 - 9$

7.  $x \cdot \frac{1}{5} = 60$

8.  $m + 3.45 = 12.8$

9.  $a = 1^5$