

## 7.1 WRITING EQUATIONS

1

An **equation** is a mathematical statement that uses an equals sign,  $=$ , to show that two expressions are equal.

*Expressions*

*Equations*

To write a word sentence as an equation, look for the words "is" or "equals" to determine where to place the equals sign.

### EXAMPLE 1 Writing Equations

**Write the word sentence as an equation.**

**a.** The sum of a number  $n$  and 7 is 15.

❖ An equation is

**b.** A number  $y$  decreased by 4 is 3.

❖ An equation is

**c.** 12 times a number  $p$  equals 48.

❖ An equation is

**EXAMPLE 2 Writing an Equation**

2

Ten servers decorate 25 tables for a wedding. Each table is decorated as shown. Let  $c$  be the total number of white and purple candles. Which equation can you use to find  $c$ ?

(A)  $c = 25 + (4 \times 6)$

(B)  $c = 25(4 + 6)$

(C)  $c = 10(25 + 4 + 6)$

(D)  $c = 10(4 + 6)$



**Words**

**Variable**

**Equation**

••• The correct answer is

**EXAMPLE 3 Real-Life Application**

After two rounds, 24 students are eliminated from a spelling bee. There are 96 students remaining. Write an equation you can use to find the number of students that started the spelling bee.

**Words**

**Variable**

**Equation**

••• An equation is

**Reading**



The word *eliminated* means *subtraction*.