

## Lesson 3-3

## Example 1

Simplify.

a.  $5 - 6 \cdot 2 + 8$

b.  $4 \cdot 9 - 32 \div 2$

## Solution

a. 
$$\begin{aligned} 5 - 6 \cdot 2 + 8 &= 5 - 12 + 8 \\ &= -7 + 8 \\ &= 1 \end{aligned}$$

b. 
$$\begin{aligned} 4 \cdot 9 - 32 \div 2 &= 36 - 32 \div 2 \\ &= 36 - 16 \\ &= 20 \end{aligned}$$

## Example 2

Simplify.

a.  $10 - (5 + 7) \div 2$

b.  $(-4 \cdot 5)^2 - 50$

## Solution

a. 
$$\begin{aligned} 10 - (5 + 7) \div 2 &= 10 - 12 \div 2 \\ &= 10 - 6 \\ &= 4 \end{aligned}$$

b. 
$$\begin{aligned} (-4 \cdot 5)^2 - 50 &= (-20)^2 - 50 \\ &= 400 - 50 \\ &= 350 \end{aligned}$$

## Example 3

**CALCULATOR** Use a calculator to simplify  $28 + (30 \div 5) - 18$ .

## Solution

Enter these keystrokes.

$$28 \boxed{+} 30 \boxed{\div} 5 \boxed{-} 18 \boxed{=} 16$$

**Example 4**

**FINANCE** Mr. Robbins started a checking account for his small business with an initial deposit of \$2500. After writing 2 checks for \$850 each and making 3 additional deposits of \$475 each, what was his new balance?

**Solution**

$$\begin{aligned}2500 - 2 \cdot 850 + 3 \cdot 475 &= 2500 - 1700 + 1425 \\ &= 800 + 1425 \\ &= 2225\end{aligned}$$

His new balance was \$2225.