### **Graphing Calculator Active**

### A.4d (a) Solving multistep linear equations

1. What is the value of x if 3 - 4x = 18 + x?

- **A** -3
- **B**  $-\frac{1}{3}\frac{1}{3}$
- $C \qquad \frac{1}{3}$
- **D** 3

2. What is the value of x if 2x + 3 = -12 - x?

- **A** -5
- $\mathbf{B} \qquad -\frac{1}{2}$
- $\mathbf{C}$   $\frac{1}{5}$
- **D** 5

3. What is the value of x if -3 + 7x = x - 17?

- $\mathbf{A} \qquad -\frac{7}{3}$
- **B**  $-\frac{3}{7}$
- $\mathbf{C} \qquad \frac{3}{7}$
- $\mathbf{D} \qquad \frac{7}{3}$

3. What is the value of x if -3x - 4 = 4x + 10?

- **A** -14
- **B** -2
- $\mathbf{C} \frac{6}{7} \frac{6}{7}$
- **D** 2

### SOL Warm-Up **Graphing Calculator Active**

### A.4d (b) Solving multistep linear equations

- What is the value of x if 6x + 7 = 13x 9? 1.

- $\mathbf{A} \frac{16}{7} \\ \mathbf{B} \frac{7}{16} \\ \mathbf{C} \frac{7}{16} \\ \mathbf{D} \frac{16}{7}$
- What is the value of x if -41x 9 = -13x 16? 2.
- **A** 4
- **B**  $-\frac{1}{4}$  **C**  $\frac{1}{4}$
- **D** 4
- 3. What is the value of x if -3 - 12x = 12x - 3?
- $\mathbf{B} = 0$
- $\mathbf{C} \quad \frac{1}{4}$
- **D** 4

# **SOL Warm-Up**

## **Graphing Calculator Active**

A.4d (c) Solving multistep linear equations and noncompound inequalities

- What is the value of x if 3(x + 4) = 2(x 1)? 1.
- **A** -14
- **B** -13
- **C** 13
- **D** 14
- 2. What is the value of x if 8x - (6x - 4) = 10?
- **A** -14
- **B** 3
- **C** 7
- **D** 14
- What is the value of x if 6x 2(3 5x) = 40? 3.
- **A**  $\frac{-23}{2}$
- **B**  $\frac{-46}{16}$  **C**  $\frac{23}{8}$
- **D**  $\frac{23}{2}$
- What is the value of x if 2(-3x + 4) = 4(-2x + 6)? 4.
- **A** -8
- **B** -1
- **C** 1
- **D** 8

# **SOL Warm-Up**

### **Graphing Calculator Active**

A.4d (d) Solving multistep linear equations and noncompound inequalities

What is the value of x if -3 + 2(4x - 13) = -40x + 7? 1.

- **A**  $-\frac{3}{4}$  **B**  $-\frac{17}{34}$  **C**  $\frac{17}{34}$  **D**  $\frac{3}{4}$

What is the value of x if -5(6 - x) = 9(x + 2) - 16? 2.

- **A** -8
- **B** -4
- **C** 4
- **D** 8

3. What is the value of x if -8(x + 1) + 3(x - 2) = -3x + 2?

- **A** -8
- **B** -2
- **C** 2
- **D** 8

4. What is the value of x if 6(x + 5) - 3(x - 2) = 12x + 18?

- **A** -8
- **B** -2
- **C** 2
- **D** 8

# **SOL Warm-Up Graphing Calculator Active**

### A.4a (a) Solving a literal equation

1. The formula for the volume of a rectangular prism is V = LWH. Which equation solves the formula for L?

$$\mathbf{A} \quad \mathbf{L} = \mathbf{V} - \mathbf{W} \mathbf{H}$$

$$\mathbf{B} \qquad L = \frac{VH}{W}$$

$$\mathbf{C}$$
  $L = \frac{VW}{H}$ 

$$\mathbf{D} \qquad L = \frac{V}{HW}$$

2. The formula for the surface area of a pyramid is:  $SA = \frac{1}{2}LP + B$ . Which equation solves the formula for P?

$$\mathbf{A} \qquad P = \frac{2SA - L}{B}$$

$$\mathbf{B} \qquad P = \frac{2SA}{B} - B$$

$$\mathbf{C} \qquad P = \frac{2SA}{L} - B$$

$$\mathbf{D} \qquad P = \frac{2SA - 2B}{L}$$

# **SOL Warm-Up Graphing Calculator Active**

### A.4a (b) Solving a literal equation

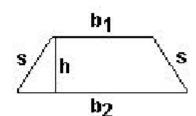
1. The figure below is an isosceles trapezoid. The formula for the area is  $A = \frac{1}{2}h(b_1 + b_2)$ . Which equation solves this formula for h?

$$\mathbf{A} \quad h = \frac{2A}{b_1 + b_2}$$

**B** 
$$h = \frac{1}{2}A - b_1 - b_2$$

$$\mathbf{C} \quad h = \frac{A}{2b_1 + 2b_2}$$

$$\mathbf{D} \quad h = \frac{b_1 + b_2}{2A}$$



2. The formula for the volume of a pyramid is  $V = \frac{1}{3}bh$ . Which equation solves the formula for h?

$$\mathbf{A} \quad \mathbf{h} = 3\mathbf{V}\mathbf{b}$$

$$\mathbf{B} \quad h = \frac{3b}{V}$$

$$\mathbf{C} \quad h = \frac{3V}{b}$$

$$\mathbf{D} \qquad h = \frac{V}{3b}$$

# **SOL Warm-Up**

## **Graphing Calculator Active**

### A.4a (c) Solving a literal equation

1. If y = mx + bk, which of the following equations is solved for m?

$$\mathbf{A} \quad m = \frac{y - bk}{x}$$

- $\mathbf{B} \quad \mathbf{m} = \mathbf{y} + \mathbf{b}\mathbf{k} \mathbf{x}$
- $\mathbf{C} \quad m = \frac{y + bk}{x}$
- $\mathbf{D} \qquad m = \frac{bk}{y x}$
- 2. If w = 7a + 4b, which of the following equations is solved for a?
- $\mathbf{A} \quad a = \frac{w 7b}{4}$
- **B**  $a = \frac{w}{7} 4b$
- $\mathbf{C} \quad a = \frac{w 4b}{7}$
- **D**  $a = \frac{w}{7} 28b$