

**Additional Practice****Lessons 2.02 and 2.03**

1. Suppose a pepperoni pizza should bake 7 minutes longer than a plain pizza.
- If a small plain pizza should bake for 12 minutes, how long should you bake a small pepperoni pizza?
  - If a large plain pizza should bake for  $m$  minutes, how long should you bake a large pepperoni pizza?

2. Match each expression below to a set of steps (a)–(c).

I.  $-3(x - 4)$

II.  $-3x - 4$

III.  $4(x - 3)$

- a. Choose any number.

Subtract 3.

Multiply by 4.

- c. Choose any number.

Multiply by  $-3$ .

Subtract 4.

- b. Choose any number.

Subtract 4.

Multiply by  $-3$ .

3. Keith writes an expression using the following steps.

- Start with  $x$ .
- Multiply by  $-2$ .
- Subtract 7.
- Subtract 12.

He writes the final expression  $-2(x - 7) - 12$ . Explain what he did wrong. Then find the correct expression.

4. Spiro says, “Choose a number. Add 5. Multiply by  $-4$ . Subtract 3.”

For each starting number given, what is your ending number?

a.  $-3$

b.  $10$

c.  $m$

d.  $0$

5. Evaluate  $\frac{3x + 5x - 6x + 2x}{x}$  for each value of  $x$ .

a.  $6$

b.  $22$

c.  $-13$

d.  $4$

6. You have a tube that can be stretched or compressed. As you change the length of the tube, the density  $d$  of the gas inside the tube and the volume

$V$  change according to the expression  $d = \frac{100}{V}$ . Find the density of the gas for each volume given in cubic units.

a.  $1$

b.  $25$

c.  $200$

7. Kathy evaluates the expression  $3x - 2$  for  $x = 5$  and  $x = 2$ . When  $x = 5$ , she gets  $3x - 2 = 3 \cdot (5 - 2) = 3 \cdot 3 = 9$ . When  $x = 2$ , she gets  $3x - 2 = 3 \cdot (2 - 2) = 3 \cdot 0 = 0$ .

- a. What does Kathy do wrong?

- b. For  $x = 5$  and for  $x = 2$ , what is the correct evaluation of  $3x - 2$ ?