

# 2.12 Translating Sentences into Equations

## • Example 1

Translate the sentence to an algebraic equation.

“9 is 5 less than  $x$ ”

We obtain:

$$9 = x - 5$$

### ● ● ● CHECK YOURSELF 1

Translate each sentence to an algebraic equation.

**a.** 8 more than 3 is  $x$ .

**b.** 7 is 6 less than twice  $x$ .

---

### ● ● ● CHECK YOURSELF ANSWER

**1.** **(a)**  $3 + 8 = x$ ; **(b)**  $7 = 2x - 6$ .

---

# 2.12 Exercises

Name \_\_\_\_\_

Section \_\_\_\_\_

Date \_\_\_\_\_

## A N S W E R S

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

Translate each of the following statements to an equation in the variable  $x$ .

1. 3 more than twice  $x$  is 7.

2. 5 less than 3 times  $x$  is 25.

3. 7 less than 4 times  $x$  is 41.

4. 10 more than twice  $x$  is 44.

5. 5 more than two-thirds  $x$  is 21.

6. 3 less than three-fourths  $x$  is 24.

7. 3 times  $x$  is 12 more than  $x$ .

8. 5 times  $x$  is 8 less than  $x$ .