

## MAIN IDEA

- Find the areas of parallelograms.

## BUILD YOUR VOCABULARY (pages 241–242)

The **base** of a parallelogram can be any one of its .

The shortest distance from the base to the  side is the **height** of a parallelogram.

## KEY CONCEPT

## Area of a Parallelogram

The area  $A$  of a parallelogram is the product of any base  $b$  and its height  $h$ .

**FOLDABLES** Write the formula for the area of a parallelogram on your Foldable.

## EXAMPLES Find Areas of Parallelograms

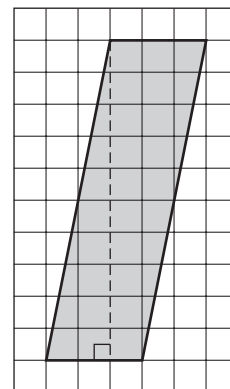
Find the area of each parallelogram.

1  $A = \text{ } \cdot \text{ }$  Area of parallelogram

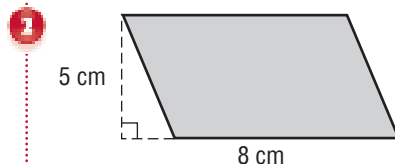
$A = \text{ } \cdot \text{ }$  Replace  $b$  with

and  $h$  with .

$A = \text{ }$  Multiply.



The area is  square units or .



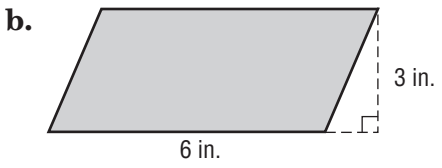
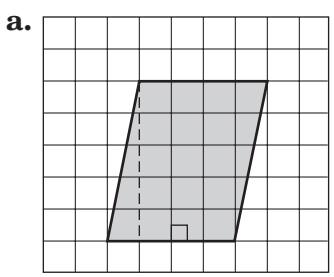
$A = \text{ } \cdot \text{ }$  Area of parallelogram

$A = \text{ } \times \text{ }$  Replace  $b$  with  and  $h$  with .

$A = \text{ }$  Multiply.

The area is  square centimeters or .

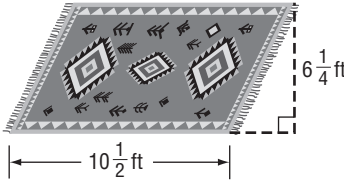
**Check Your Progress** Find the area of each parallelogram.



**EXAMPLE**

**INTERIOR DESIGN** Find the area of the floor that the rug will cover.

The area rug is a parallelogram, so use the formula  $A = bh$ .



$A = \square \cdot \square$

Area of parallelogram

$A = (\square) (\square)$

Replace  $b$  with  $\square$  and  $h$  with  $\square$ .

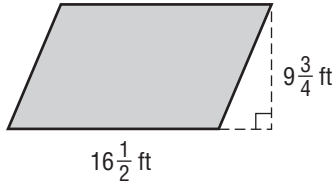
$A = \square$  or  $\square$

$10\frac{1}{2} = \frac{21}{2}, 6\frac{1}{4} = \frac{25}{4}$

The area rug will cover  $\square$  square feet.

**Check Your Progress** **ART**

Find the area of the mural that John needs to paint.



**REVIEW IT**

Write the mixed numbers  $10\frac{1}{2}$  and  $6\frac{1}{4}$  as decimals.  
(Lesson 4-8)

**HOMEWORK ASSIGNMENT**

Page(s):

Exercises: