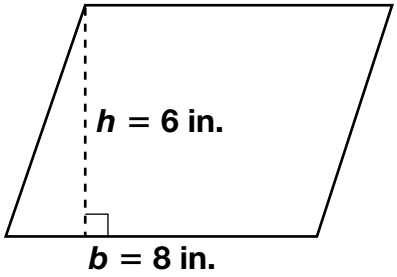
Name _____

Reteaching
12-2

Area of Parallelograms and Rhombuses

Find the area of this parallelogram.



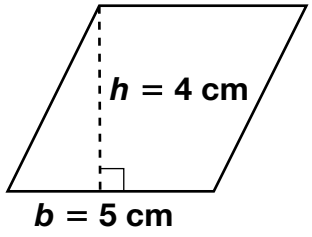
Use the formula $A = bh$.

$A = 8 \times 6$

$A = 48$ in^2

The area of the parallelogram is 48 sq in.

Find the area of this rhombus.



Use the formula $A = bh$.

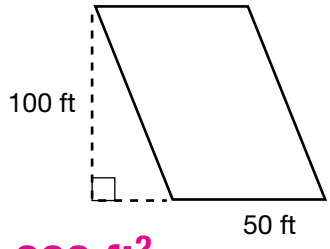
$A = 5 \times 4$

$A = 20$ cm^2

The area of the rhombus is 20 cm^2.

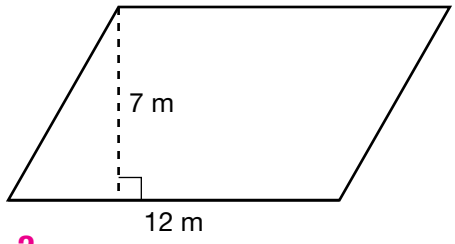
Find the area of each parallelogram or rhombus.

1.



5,000 ft^2

2.



84 m^2

3. Rhombus: $b = 6$ ft, $h = 4$ ft

24 ft^2

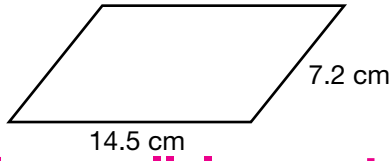
4. Parallelogram: $b = 18$ m, $h = 13.5$ m

243 m^2

5. Parallelogram: $b = 20$ in., $h = 9\frac{1}{2}$ in.

190 in^2

6. Writing to Explain Tony says he does not have enough information to find the area of this parallelogram. Is he correct? Explain.



He is correct. He needs the height of the parallelogram to calculate the area.

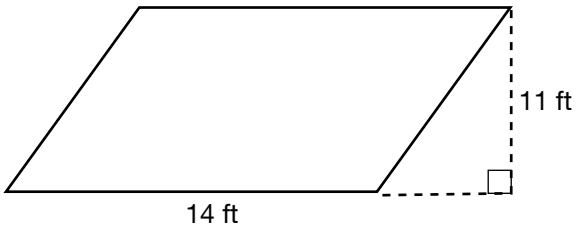
Name _____

Practice
12-2

Area of Parallelograms and Rhombuses

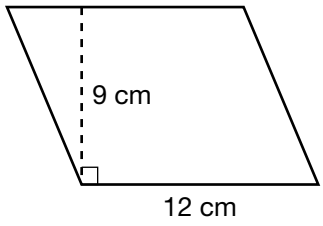
Find the area of each parallelogram or rhombus.

1.



$A = 154 \text{ ft}^2$

2.



$A = 108 \text{ cm}^2$

3. Rhombus
$b = 30$ m
$h = 15.5$ m

$A = 465 \text{ m}^2$

4. Parallelogram
$b = 18$ in.
$h = 2\frac{1}{2}$ in.

$A = 45 \text{ in}^2$

5. Parallelogram
$b = 20$ ft
$h = 3$ yd

$A = 180 \text{ ft}^2$

6. Writing to Explain The area of a parallelogram is 42 square inches. The parallelogram's base is 6 inches. Find the height of the parallelogram. Explain how you do it.

Sample answer: I substituted the numbers I know into the formula and solved for h. $A = bh$; $42 = (6)h$; $42 \div 6 = 6h \div 6$; $7 \text{ in.} = h$.

7. Number Sense A parallelogram has a base of 4 m and a height of 3 m. Find the area of the parallelogram in square centimeters.

$(400)(300) = 120{,}000 \text{ cm}^2$

8. Estimation Which is the best estimate of the area of a parallelogram that has a base of 11.42 cm and a height of 8.33 cm?

A 200 cm^2 **B** 160 cm^2 **C** 100 cm^2 **D** 50 cm^2

9. Reasoning The area of a figure is 36 cm^2. Give 3 possible shapes of the figure. Where possible give 3 possible sets of dimensions for each possible shape.

Square, rectangle, parallelogram; If the figure is a square, the only possible dimensions are 6 cm × 6 cm. If the figure is a rectangle or a parallelogram, possible dimensions are 3 cm × 12 cm, 4 cm × 9 cm, 1 cm × 36 cm.

