

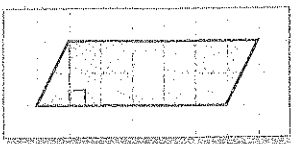
Area of Parallelograms

Guided Practice

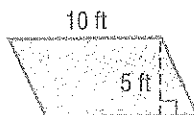
Find the area of each parallelogram. (Examples 1 and 2)

1.

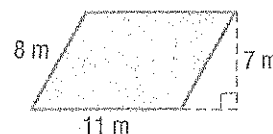
Show your work



2.



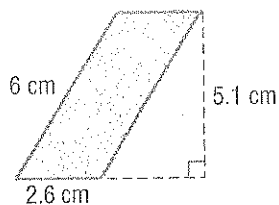
3.



4. Find the height of a parallelogram if its base is 35 centimeters and its area is 700 square centimeters.

(Example 3)

5. The size of the parallelogram piece in a set of tangrams is shown at the right. Find the area of the piece. (Example 4)



Independent Practice

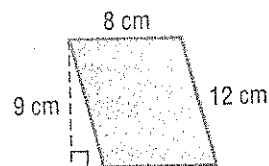
Find the area of each parallelogram. (Examples 1 and 2)

1.

Show your work



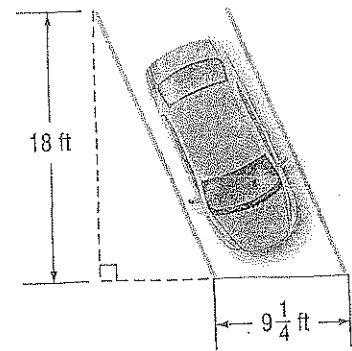
2. base, 6 millimeters;
height, 4 millimeters



4. Find the base of a parallelogram with an area of 24 square feet and height 3 feet. (Example 3)

5. Find the area of the parking space shown to the right.

(Example 4)



6. **STEM** An architect designed three different parallelogram-shaped brick patios. Write the missing dimensions in the table.

Patio	Base (ft)	Height (ft)	Area (ft ²)
1	$15\frac{3}{4}$		147
2		$11\frac{1}{4}$	$140\frac{5}{8}$
3	$10\frac{1}{4}$		$151\frac{3}{16}$

Show your work.

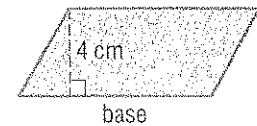
7. The base of a building is shaped like a parallelogram. The first floor has an area of 20,000 square feet. If the base of this parallelogram is 250 feet, can its height be 70 feet? Explain.

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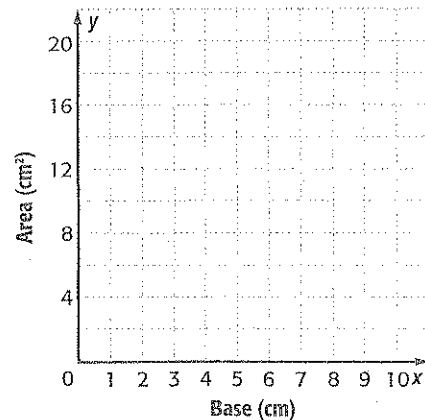
9. **CCSS Multiple Representations** Draw five parallelograms that each have a height of 4 centimeters and different base measurements on centimeter grid paper.



a. **Table** Make a table with a column for base, height, and area.

Base (cm)	Height (cm)	Area (cm ²)
	4	
	4	
	4	
	4	
	4	

b. **Graph** Graph the ordered pairs (base, area).



16. Find the height of a parallelogram with base 6.75 meters and an area of 218.7 square meters.

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17. Find the area of a parallelogram with base 15 yards and height $21\frac{2}{3}$ yards.

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