Name_____

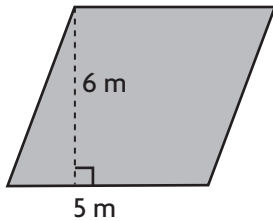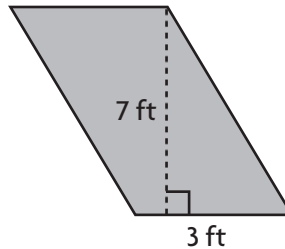# Algebra: Area of Parallelograms

Find the area of each parallelogram.
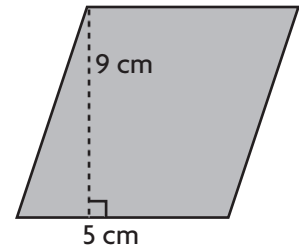
1.
6 m
5 m

_____

2.
7 ft
3 ft

_____

3.
9 cm
5 cm

_____

4.
$5\frac{1}{2}$ in.
8 in.

_____

5.
13 ft
13 ft

_____

6.
10.4 yd
13.6 yd

_____

Problem Solving and Test Prep

7. A yard is shaped like a parallelogram with a base of 27 m and a height of 30 m. What is the area of the yard?

_____

8. A parallelogram has a length of 15 cm and a height of 20 cm. It is divided into two congruent triangles. What is the area of each triangle?

_____

9. What is the area of the parallelogram?

14 ft
21 ft

A 300 ft²

B 70 ft²

C 294 ft²

D 147 ft²

10. A playground is divided into two equal parallelograms. What is the area of the entire playground? Show your work.

12 m
20 m

_____

Practice
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Algebra: Area of Parallelograms

Find the area of each parallelogram.

①
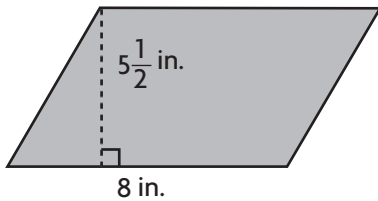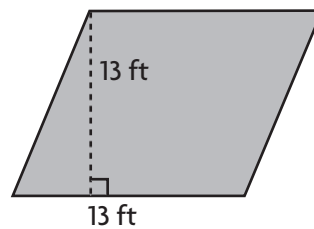
6 m
5 m

②
7 ft
3 ft

③
9 cm
5 cm

30 m²   **21 ft²**   **45 cm²**

④
$5\frac{1}{2}$ in.
8 in.

⑤
13 ft
13 ft

⑥
10.4 yd
13.6 yd
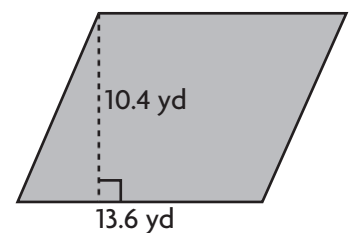
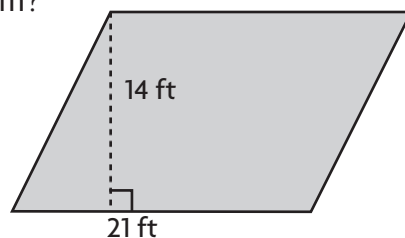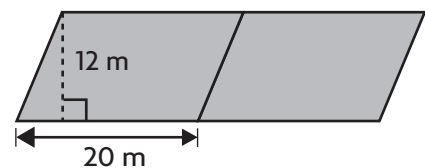**44 in.²**   **169 ft²**   **141.44 yd²**

Problem Solving and Test Prep

⑦ A yard is shaped like a parallelogram with a base of 27 m and a height of 30 m. What is the area of the yard?

810 m²

8. A parallelogram has a length of 15 cm and a height of 20 cm. It is divided into two congruent triangles. What is the area of each triangle?

150 cm²

9. What is the area of the parallelogram? **C**

14 ft
21 ft

A 300 ft²
B 70 ft²
C 294 ft²
D 147 ft²

10. A playground is divided into two equal parallelograms. What is the area of the entire playground? Show your work.

12 m
20 m
480 m²

Circled problems are suggested homework problems.

Problem Solving Workshop Strategy: Solve a Simpler Problem

Problem Solving Strategy Practice

Solve.

① Jane designed the figure below as a sun catcher. What is the area of the figure?

4 in.   14 in.   6 in.
6 in.   8 in.

120 in.²

② Luke made his sun catcher into a rocket. What is the area of the rocket?

6 cm
5 cm   18 cm   5 cm
5 cm   5 cm
6 cm

223 cm²

Mixed Strategy Practice

USE DATA For 3–4, use the diagram.

③ Chris designed his sun catcher to the right into an airplane. What is the area of Chris' airplane?

4 cm   11 cm
5 cm   1 cm
5 cm   7 cm   20 cm
4 cm

157 cm²

④ Chris bought the materials for the sun catcher. He paid $1.50 each for each rectangle, $2.25 for each triangle, $1.75 for each parallelogram, $3.00 for stain and 3 feet of chain for $4.50 a foot. How much did Chris spend in all?

$23.75

⑤ Joy made a sun catcher with alternating blue and red squares. She began with a blue square. The sun catcher has 9 rows of 5 squares each. How many squares of each color are there?

23 blue; 22 red

Circled problems are suggested homework problems.

Lesson 24.5	
Item	**Suggested rationale**
1	find area of parallelogram using area formula
2	find area of parallelogram using area formula
3	find area of parallelogram using area formula
4	find area of parallelogram using area formula
5	find area of parallelogram using area formula
6	find area of parallelogram using area formula
7	find area of parallelogram using area formula to solve word problem
10	find area of parallelogram using area formula to solve word problem in test prep format

Lesson 24.6	
Item	**Suggested rationale**
1	find area of figure using simpler problem strategy
2	find area of figure using simpler problem strategy
3	find area of figure using simpler problem strategy to solve word problem
4	use diagram and simpler problem strategy to solve word problem
5	use diagram and simpler problem strategy to solve word problem