

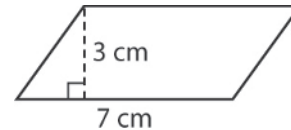
LESSON
13-1**Area of Quadrilaterals****Reteach**

You can use formulas to find the areas of quadrilaterals.

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

$$A = bh$$

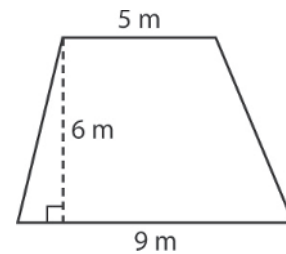
$$\begin{aligned} A &= bh \\ &= 3 \cdot 7 \\ &= 21 \text{ cm}^2 \end{aligned}$$



The area of a **trapezoid** is half its height multiplied by the sum of the lengths of its two bases.

$$A = \frac{1}{2}h(b_1 + b_2)$$

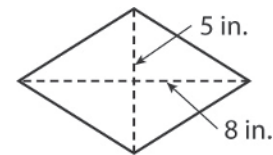
$$\begin{aligned} A &= \frac{1}{2}h(b_1 + b_2) \\ &= \frac{1}{2} \cdot 6(5 + 9) \\ &= \frac{1}{2} \cdot 6(14) \\ &= 3 \cdot 14 \\ &= 42 \text{ m}^2 \end{aligned}$$



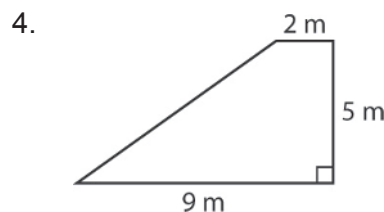
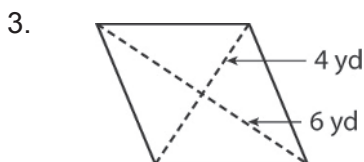
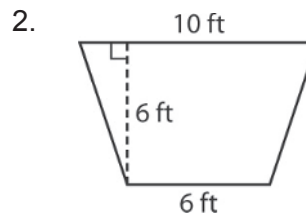
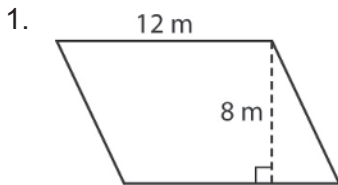
The area of a **rhombus** is half of the product of its two diagonals.

$$A = \frac{1}{2}d_1d_2$$

$$\begin{aligned} A &= \frac{1}{2}d_1d_2 \\ &= \frac{1}{2}(5)(8) \\ &= 20 \text{ in}^2 \end{aligned}$$



Find the area of each figure.

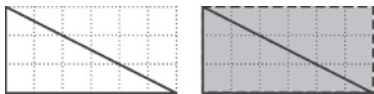


LESSON

13-2

Area of Triangles**Reteach**

To find the area of a triangle, first turn your triangle into a rectangle.



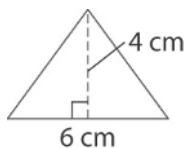
Next, find the area of the rectangle. $6 \cdot 3 = 18$ square units

The triangle is half the area of the formed rectangle or $A = \frac{1}{2}bh$, so divide the product by 2.

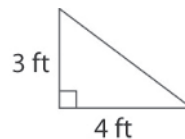
$18 \div 2 = 9$ So, the area of the triangle is 9 square units.

Find the area of each triangle.

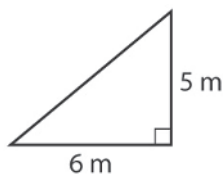
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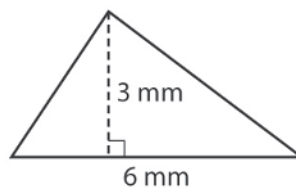
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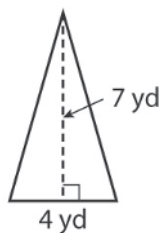
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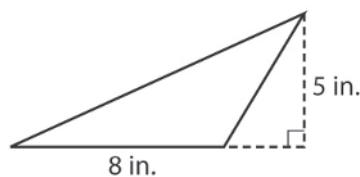
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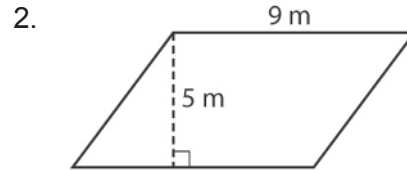
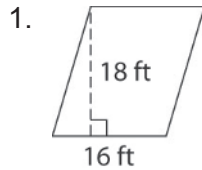
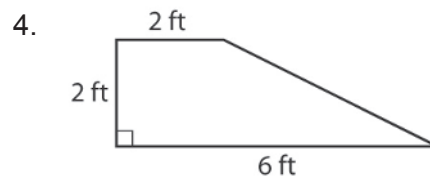
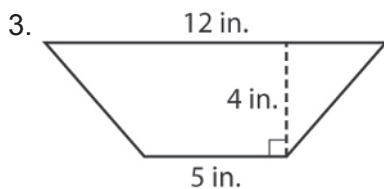
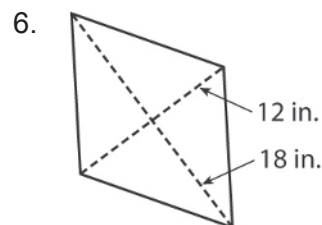
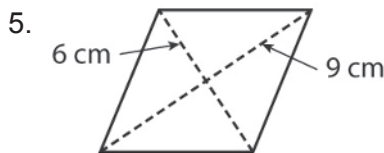


5.



6.



LESSON
13-1**Area of Quadrilaterals****Practice and Problem Solving: A/B****Find the area of each parallelogram.****Find the area of each trapezoid.****Find the area of each rhombus.****Solve.**

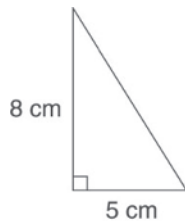
7. A desktop in the shape of a parallelogram has a base of 30 inches and a height of 40 inches. What is the area of the desktop?
- _____

8. A rhombus has one diagonal that is 14 centimeters long and one diagonal that is 12 centimeters long. What is the area of the rhombus?
- _____

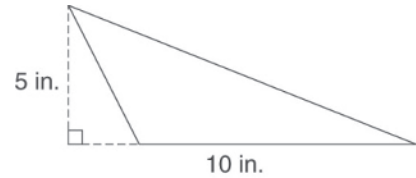
9. The bases of a trapezoid are 24 feet and 16 feet. The height of the trapezoid is 12 feet. What is the area of the trapezoid?
- _____

LESSON
13-2**Area of Triangles****Practice and Problem Solving: A/B****Find the area of each triangle.**

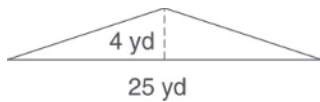
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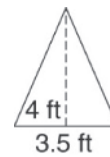
2.



3.



4.

**Solve.**

5. The front part of a tent is 8 feet long and 5 feet tall. What is the area of the front part of the tent?

6. Kathy is playing a board game. The game pieces are each in the shape of a triangle. Each triangle has a base of 1.5 inches and a height of 2 inches. What is the area of a game piece?

7. A triangular-shaped window has a base of 3 feet and a height of 4 feet. What is the area of the window?

8. Landon has a triangular piece of paper. The base of the paper is $6\frac{1}{2}$ inches. The height of the paper is 8 inches. What is the area of the piece of paper?

