Additional Practice with Area

Name of Polygon	Rectangle	Parallelogram	Triangle	Trapezoid
Picture	22 cm 8 cm	10 in 9 in 12 in	9 4 5	7 4 5
Write the formula	A = bh	A = bh	$A=\frac{1}{2}bh$	$A = h \frac{(b_1 + b_2)}{2}$
Substitute for the variables (Show work)				
Solve. Include square units in your answer.	176 cm ²	108 in²	24 units²	28 units²

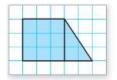
Area of Composite Figures

A composite figure is a figure made of two or more two-dimensional figures. The composite figure shown to the right is made of two rectangles.



Find the Area of a Composite Figure

You can decompose some trapezoids into a square and a triangle to find the area.



Area of Square

$$A = \ell \cdot w$$

$$A = 3 \cdot 3$$
, or 9

Area of Triangle

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

$$A = \frac{1}{2}(2)(3)$$
, or 3

Then add the area of the square and the area of the triangle to find the area of the trapezoid. The area of the trapezoid is 9+3 or 12 square units.

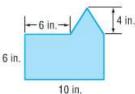
You can find the area of a composite figure using the same strategy. To find the area of a composite figure, separate it into figures with areas you know how to find. Then add those areas.

Example



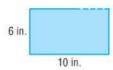
1. Find the area of the figure at the right.

The figure can be separated into a rectangle and a triangle. Find the area of each.



Area of Rectangle

Area of Triangle





$$A = \ell w$$

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

$$A = 10 \cdot 6 \text{ or } 60$$

$$A = \frac{1}{2}(4)(4)$$
 or 8

The base of the triangle is 10 - 6 or 4 inches.

The area is 60 + 8 or 68 square inches.