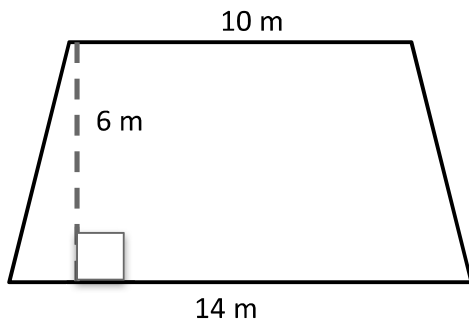


Name: \_\_\_\_\_

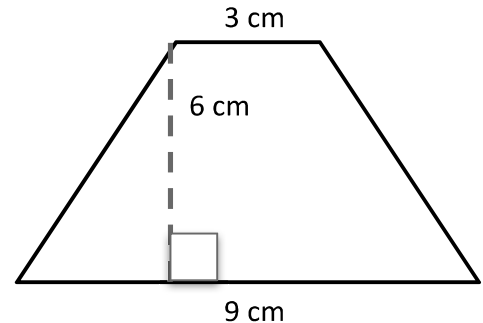
Date: \_\_\_\_\_

# Area of Trapezoids

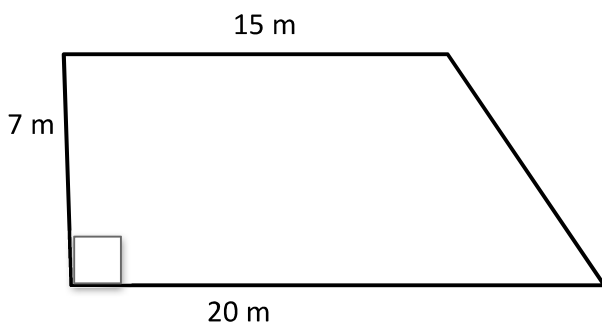
1. A trapezoid is:  
quadrilateral with exactly one pair of parallel sides
2. A trapezoid has two bases.
3. The bases of a trapezoid are perpendicular to the height.
4. The area of a trapezoid is one half the product of its height and the sum of its bases
5. The algebraic formula for area of a trapezoid is:  $A = h(b_1 + b_2) / 2$  or  $A = 1/2h(b_1 + b_2)$  Find the area of each trapezoid below:



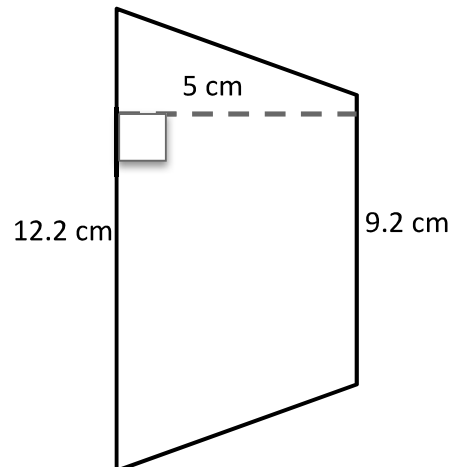
$72 \text{ m}^2$



$36 \text{ cm}^2$



$122.5 \text{ m}^2$



$53.5 \text{ cm}^2$

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Practice: Area of Trapezoids

#1 What is the area of the trapezoid with the following dimensions:

$b_1 = 5 \text{ in}$

$b_2 = 2 \text{ in}$

$h = 7 \text{ in}$

$24.5 \text{ in}^2$

#2 What is the area of the trapezoid with the following dimensions:

$b_1 = 20 \text{ in}$

$b_2 = 30 \text{ in}$

$h = 10 \text{ in}$

$250 \text{ in}^2$

#3 What is the area of the trapezoid with the following dimensions:

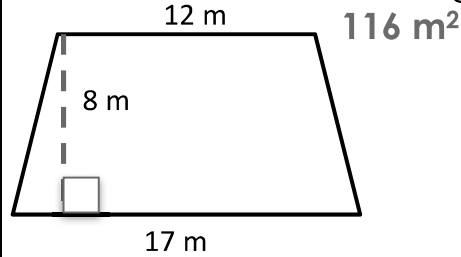
$b_1 = 4.1 \text{ m}$

$b_2 = 4.2 \text{ m}$

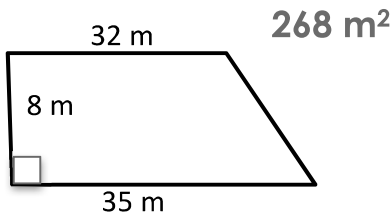
$h = 4.5 \text{ m}$

$18.675 \text{ in}^2$

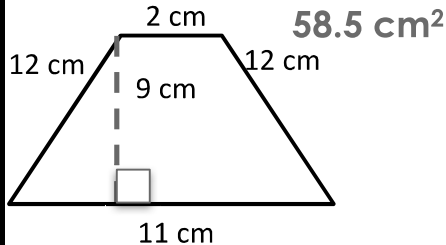
#4 Find the area of the figure below:



#5 Find the area of the figure below:



#6 Find the area of the figure below:



#7 Rebecca is mowing the lawn at the local park. The park is shaped like a trapezoid. One base has a length of 100 ft. The other base has a length of 200 ft. It has a height of 200 ft. Find the area that she has to mow.

**30,000 square feet**