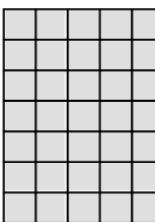


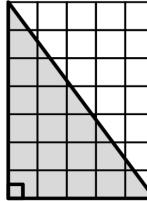
## Unit 9 Triangles and Trapezoids

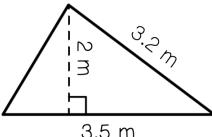
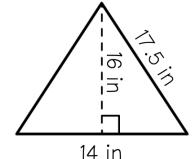
Unit 9 Geometry  
Day 8 / 6.8(B), 6.8(C)

Name \_\_\_\_\_  
Date \_\_\_\_\_ Period \_\_\_\_\_

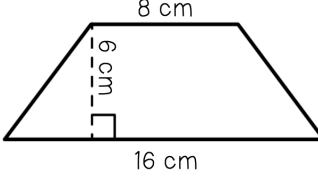
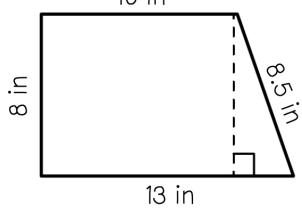
Two different figures are shown below, a rectangle and a triangle. If the formula for the area of a rectangle is  $A = b \cdot h$ , what would you predict the formula for the area of a triangle to be?

RECTANGLE 1

Formula: _____
Plug in Values: _____
Area: _____

TRIANGLE 1

Formula: _____
Plug in Values: _____
Area: _____

TRIANGLE 2	TRIANGLE 3
	
Formula: _____	Formula: _____
Plug in Values: _____	Plug in Values: _____
Area: _____	Area: _____

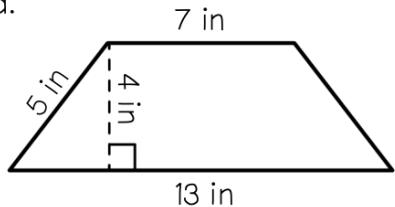
Decompose (take apart) the trapezoids to the right into familiar shapes. Then, find the area of each trapezoid.

TRAPEZOID 1	TRAPEZOID 2
	

## AREA OF TRAPEZOIDS

- A trapezoid is one or two \_\_\_\_\_ and a \_\_\_\_\_ combined.
- To find the area, use the formula \_\_\_\_\_, where:
  - $b_1$  is the \_\_\_\_\_
  - $b_2$  is the \_\_\_\_\_ and
  - $h$  is the \_\_\_\_\_ of the trapezoid.

1. Use a formula to determine the area of the trapezoid.

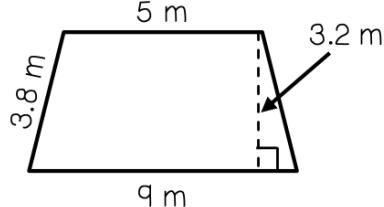


Formula: \_\_\_\_\_

Plug in Values: \_\_\_\_\_

Area: \_\_\_\_\_

2. Use a formula to determine the area of the trapezoid.



Formula: \_\_\_\_\_

Plug in Values: \_\_\_\_\_

Area: \_\_\_\_\_

## AREA OF TRIANGLES AND TRAPEZOIDS

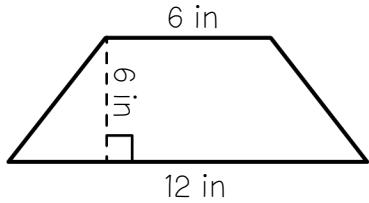
Match each correct answer to a letter and complete the riddle below. Not all choices will be used.

1

Find the area of a right triangle with a height of  $8\frac{1}{2}$  feet and a base of 15 feet.

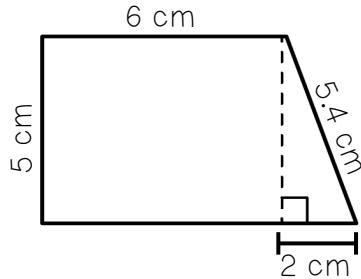
2

What is the area of the trapezoid?



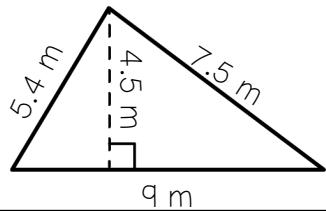
3

Find the area of the trapezoid at the right.



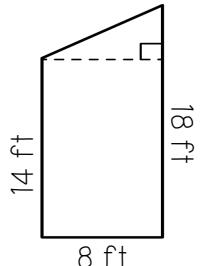
4

Find the area of the triangle below.



5

Find the area of the trapezoid at the right by decomposing it into familiar shapes.

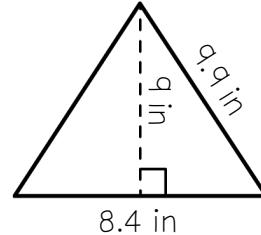


6

A triangle has an area of  $42 \text{ cm}^2$ . The height of the triangle is 14 centimeters. What is the length of the base of the triangle?

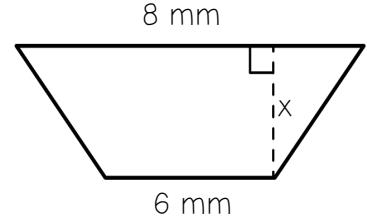
7

What is the area of the triangle?



8

A trapezoid has an area of  $35 \text{ mm}^2$ . What is the height of the trapezoid?



L: 36

A: 5

F: 12.15

H: 56

R: 37.8

I: 127.5

S: 50.4

C: 12

U: 20.25

N: 35

P: 108

A: 128

R: 63.75

Q: 3

W: 35.4

E: 6

G: 54

T: 24

WHAT DO GEOMETRY TEACHERS HAVE DECORATING THEIR FLOORS?