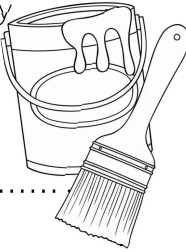


AREA OF COMPOSITE FIGURES

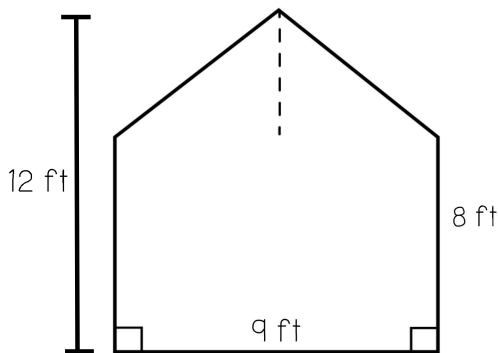
Janie and Miguel are painting a mural in the school gymnasium. They will need to paint the entire wall blue except for the circular school logo. How can Janie and Miguel determine how many square feet they will cover in blue paint?



COMPOSITE FIGURES

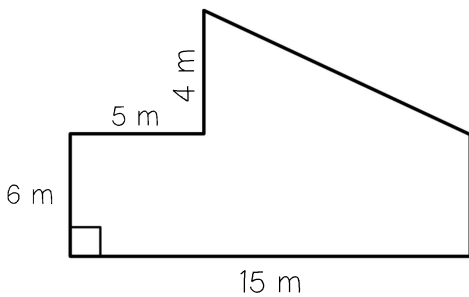
- A _____ figure is made up of two or more shapes.
- We can find the _____ of a composite figure by decomposing the figure into familiar shapes. Then, _____ or _____ the area of each shape.

Decompose the figures below. Then, use the graphic organizer to find the area of each shape.



TOTAL AREA _____

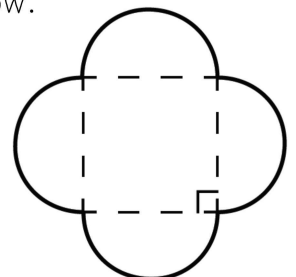
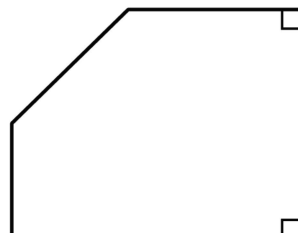
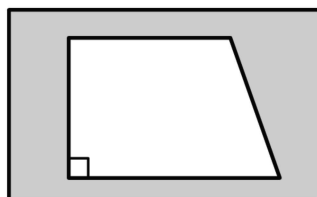
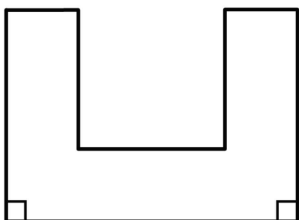
	SHAPE 1	SHAPE 2
NAME		
FORMULA		
PLUG IN VALUES		
AREA		



TOTAL AREA _____

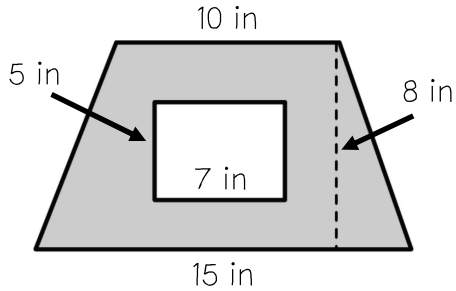
	SHAPE 1	SHAPE 2
NAME		
FORMULA		
PLUG IN VALUES		
AREA		

a. Discuss the different ways you could determine the area of the figures below.

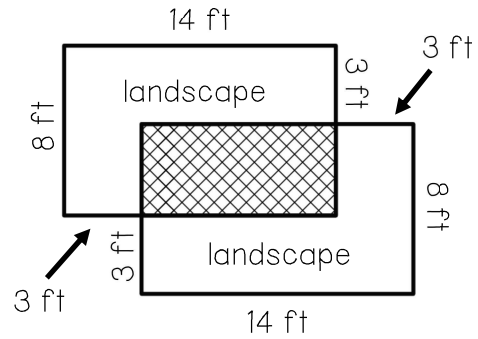


Use your understanding of composite figures to answer the questions below.

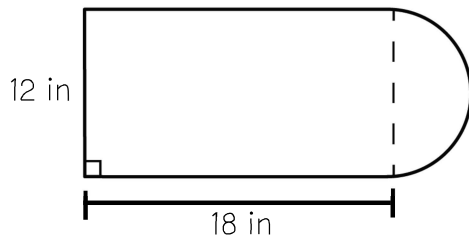
1. A rectangle is inscribed in a trapezoid. Determine the area of the shaded region.



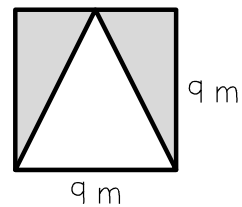
2. A patio is being landscaped with trees and shrubs. How many square feet of landscaping will be around the patio?



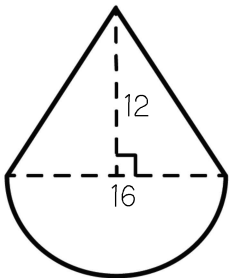
3. A composite figure is created using a rectangle and a semicircle. What is the area of the figure?



4. Find the area of the shaded region.



5. Beth and Jena worked the following problem on a math test. They both solved the problem incorrectly. Identify the mistake each person made and solve for the correct answer.



BETH

$$\frac{1}{2}(16)(12) + (3.14)(8^2)$$

$$96 + 200.96$$

$$296.96 \text{ units}^2$$

JENA

$$\frac{1}{2}(16)(12) + \frac{1}{2}(3.14)(16^2)$$

$$96 + 401.92$$

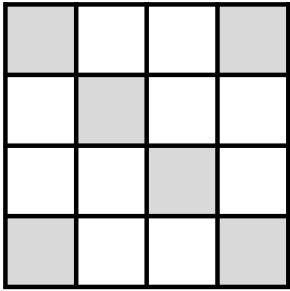
$$497.92 \text{ units}^2$$

Summarize today's lesson:

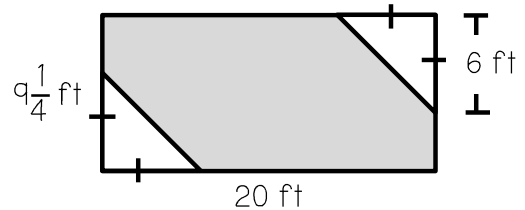
AREA OF COMPOSITE FIGURES

Answer the questions below. Be sure to show your thinking.

1. A 2 ft by 2 ft square is divided into smaller squares and portions are shaded. What is the area of the shaded portion?



2. A garden is sodded in the shaded portion below. How many square feet were covered with sod?



Use the composite figures below to mark each statement as true or false. Justify your choices.

3.

FIGURE A

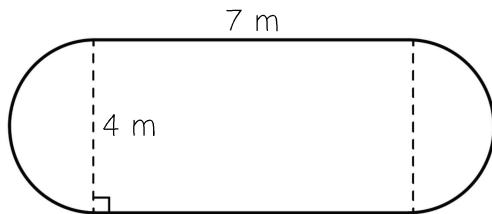
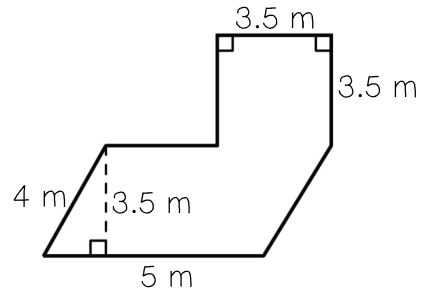


FIGURE B



STATEMENT	T/F?	JUSTIFY
a. The area of figure A can be found by determining the sum of the area of the rectangle and the area of a semicircle.		
b. The area of figure B can be found by decomposing the figure into a square and a parallelogram.		
c. Figure B has a total area of 29.75 m ² .		
d. The area of figure A is 45.99 m ² more than the area of figure B.		