

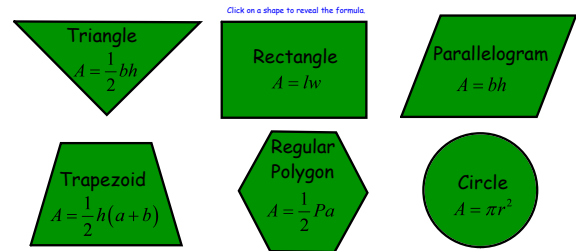
# Math 7H - Unit 5

## Day 11 - Area of Composite Figures

### Lesson Objectives:

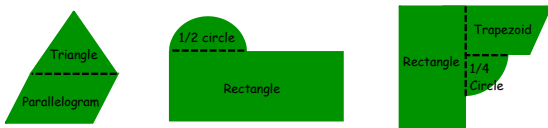
- I can solve real-world and mathematical problems involving area of two-dimensional objects composed of triangles, quadrilaterals, and polygons.

What are the most common formulas for area of polygons that we've talked about this unit?



When finding areas of irregular figures, it's sometimes easier to find areas of polygons or pieces of polygons.

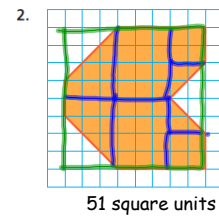
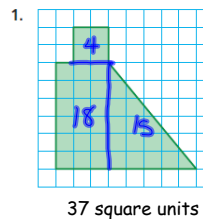
What polygons would make finding the area of the irregular figures below easier to find?



Click inside each figure to make polygons appear.

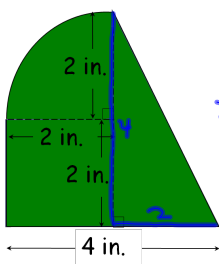
Are these the only options?

Find the area of the shaded figure.



$$64 - 4 - 4.5 - 4.5$$

Find the area of the figure to the nearest tenth.



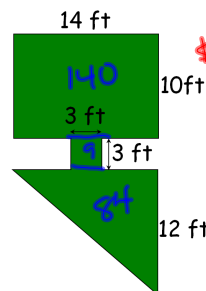
Triangle  $A = \frac{1}{2}bh$   
 $A = \frac{1}{2}(2)(4) = 4 \text{ in}^2$

$\frac{1}{4}$  Circle  $A = \frac{1}{4}(\pi r^2)$   
 $\frac{1}{4}(\pi)(2^2) = \frac{1}{4}\pi(4) = \pi \approx 3.1 \text{ in}^2$

Square  $A = l \cdot w$   
 $= 2 \cdot 2 = 4$

$4 + 3.1 + 4 = 11.1 \text{ in}^2$

Carpeting costs \$2 per square foot. How much will it cost to carpet the area shown?



$$\$466$$

$$140 + 9 + 84 = 233 \text{ ft}^2$$

$$\begin{array}{r} \times 2 \\ \$466 \end{array}$$

## Homework

### Area of Composite Figures WKS

\* Individual Think Time \*



What to do if you get stuck...

1. Reread the problem. Did you write it down correctly?
2. Reread your notes. Is there a problem similar that we did together in class?
3. Find a problem similar in your book. Try this one to see if it helps.
4. Skip the problem until the end of Individual Think Time. Then ask an "educated" question of a neighbor or Mrs. Call.

Today we're working by...



## Irregular Area Activity

