## Understanding Area - Lesson 11-1

Today we started covering area....
Here's the warmup!

COED is a rectangle.
Find the length of the radius of the circle.


We'll start by remembering how to find the area of a rectangle:


Postulate: (Rectangle Area Postulate) - The area of a rectangle is given by the formula $A=b h$ where $A$ is the area, $b$ is the length of the base, and $h$ is the height of the rectangle.

Here are a couple of things that should be pretty straight forward to understand:


Postulate: Every region has an area.

Postulate: If two closed figures are congruent, then their areas are equal (e.g., In the diagram above, if $A B C D E F=P Q R S T U$, then their areas are equal).


Postulate: If two closed regions intersect only along a common boundary, the the area of their union is equal to the sum of their individual areas.

Let's finish by doing the following example:

Find the area of the figure below:


