

## Launch:

1. If your family puts up a fence around your rectangular yard, how much fencing do you need?



2. How many square feet does this enclose?

## Perimeter/Circumference and Area

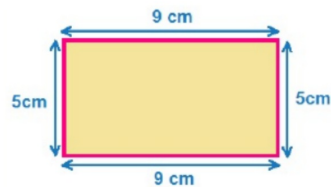
Objective: To calculate the perimeter of basic polygons and the circumference of circles.

To calculate the area of triangles, rectangles and circles

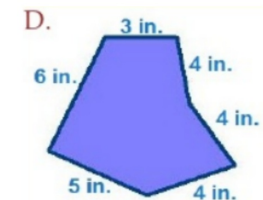
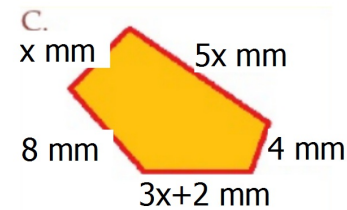
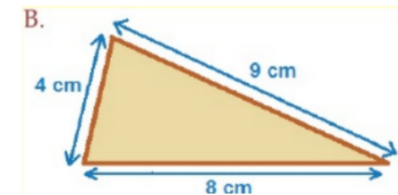
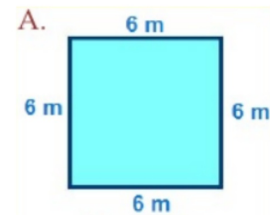
## Perimeter

The **perimeter** of a figure is the distance all the way around the figure.  
It is found by adding the lengths of the sides together.

What is the perimeter of the following figure?

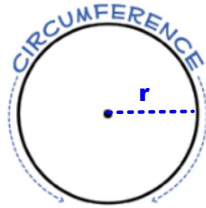


## Find the perimeter:



## CIRCUMFERENCE

The **circumference** of a circle is the distance around it.

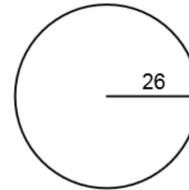


The formula for circumference involves an irrational number,  $\pi$ .

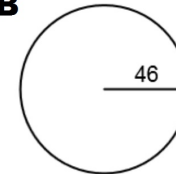
$$C = 2\pi r$$

Find the circumference:

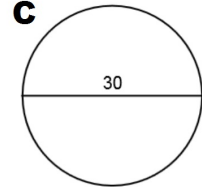
**A**



**B**

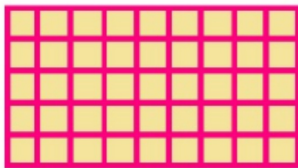


**C**



## Area

The **area** of a figure is the number of square units that cover the surface of the closed figure

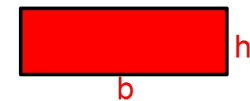


You could count all of these squares to find the area....  
But there is a faster way. How do we calculate the area of a rectangle?

Basic area formulas:

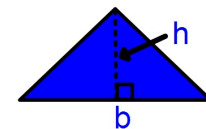
Rectangle

$$A = bh$$



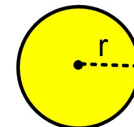
Triangle

$$A = \frac{1}{2}bh$$

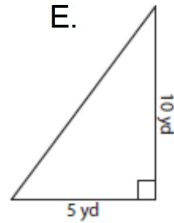
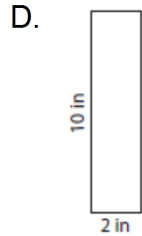
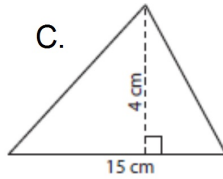
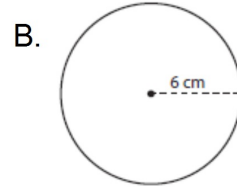
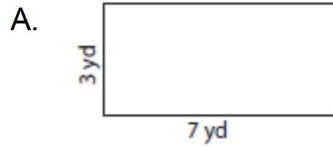


Circle

$$A = \pi r^2$$

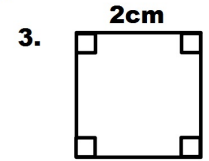
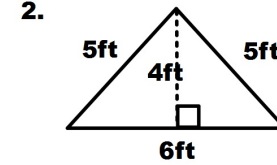
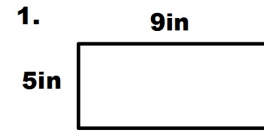


Find the areas:

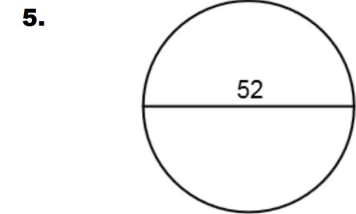
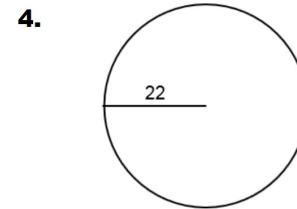


Assignment:

Find the perimeter and area for each



Find the circumference and area for each



EXIT TICKET:

A farmer needs to buy fertilizer to spread on his garden. The garden is a 20ft by 15ft rectangle.

1. How many square feet is the garden?

2. How many feet of fencing would he need to enclose the garden?