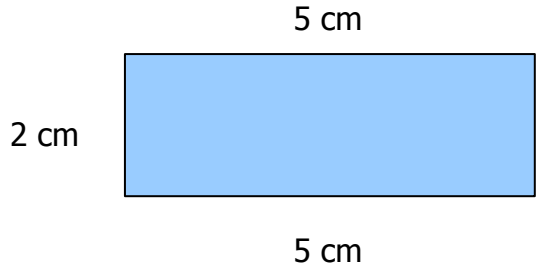
NAME_____

# Perimeter and Area

using Pythagorean Theorem

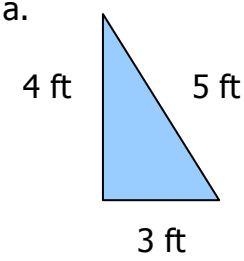
The **perimeter** of an object is the distance around it.
For example, since the side lengths of the following rectangle are 5 cm, 2, cm, 5 cm and 2 cm, the perimeter of the object is 14 cm.



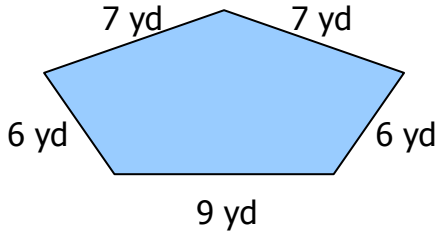

5 + 2 + 5 + 2 = 14 cm

Evaluate the perimeter of each of the figures below...

a.



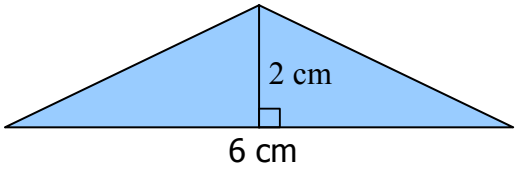

b.




The **area** of a 2 dimensional object is the space that it takes up.
For example the formula for the area of a triangle is...

**area = ½ * length of base * height**

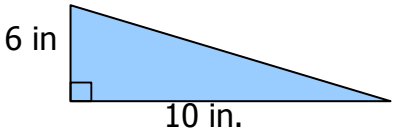
So if you were to want to evaluate the area of the triangle below, you would do it as follows...



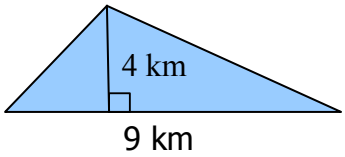

area = ½ * length of base * height
area = ½ * 6 * 2
area = ½ * 12
area = 6 $cm^2$

Evaluate the area of each of the figures below...

a.

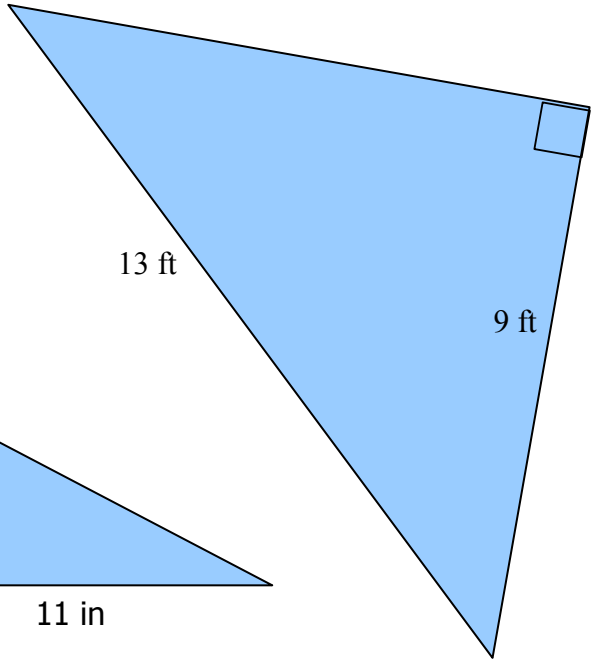



b.

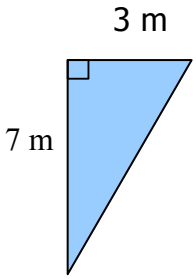


**Directions:** Apply the pythagorean theorem first, then evaluate the **perimeter** of each of the following...

1.



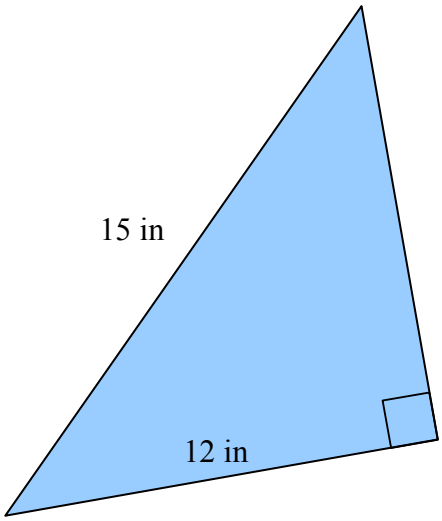

2.




3.

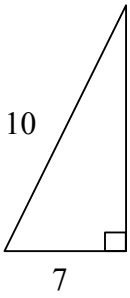



4.

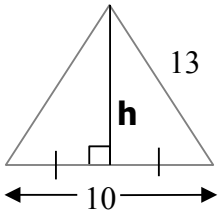



**Directions:** Apply the pythagorean theorem first, then evaluate the **area** of each of the following...

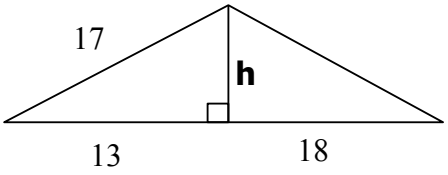
5.




6.




7.




8.