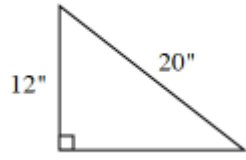
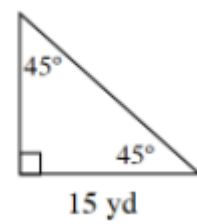
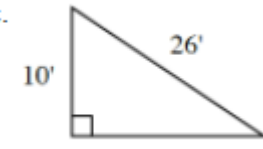
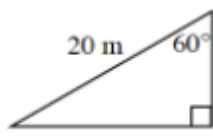


Name _____

Period ____ Date _____

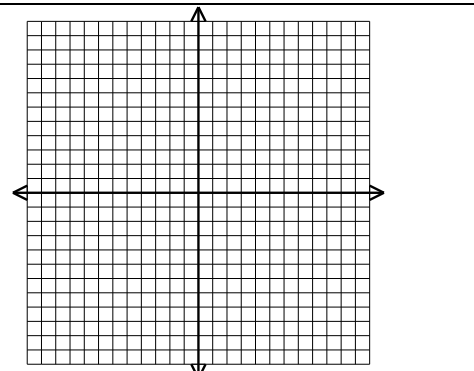
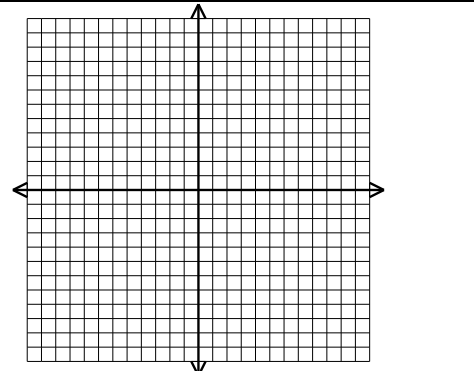
Homework 6.1.2 – 6.1.3

1. Use the patterns you have investigated to determine the missing side lengths of each of the triangles below. You should not have to use a calculator.

<p>a.</p>  <p>12" 20"</p>	<p>b.</p>  <p>45° 45° 15 yd</p>
<p>c.</p>  <p>10' 26'</p>	<p>d.</p>  <p>20 m 60°</p>

2. For each description below, sketch the parabola that matches the given information.

Write the equation for each.

<p>a) A parabola with x-intercepts of $(-2, 0)$ and $(-7, 0)$ and a y-intercept of $(0, -8)$</p>	
<p>b) A parabola with only one x-intercept at $(1, 0)$ and a y-intercept $(0, 3)$</p>	

3. Find all of the trigonometric ratios for this triangle.

Sketch of Triangle

$$\sin(A) = \frac{8}{17}$$

$$\sin(B) =$$

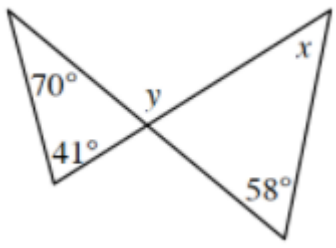
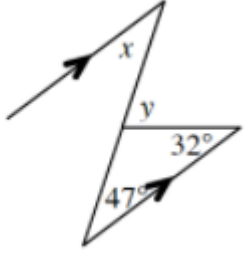
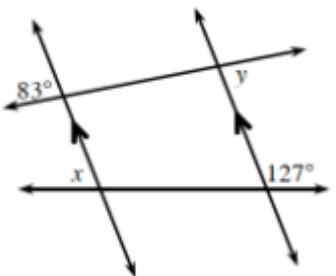
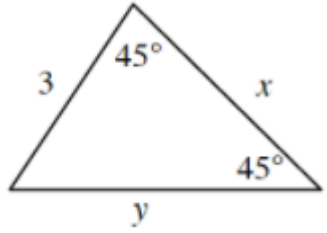
$$\cos(A) =$$

$$\cos(B) =$$

$$\tan(A) =$$

$$\tan(B) =$$

4. Use the relationships found in each of the diagrams below to solve for x and y . Assume the diagrams are not drawn to scale. State which geometric relationships you used.

<p>a.</p> 	<p>b.</p> 
<p>c.</p> 	<p>d.</p> 

5. Solve the quadratic equation below. You will need to use a calculator.

$$3x^2 - 1.5x = 17.5$$