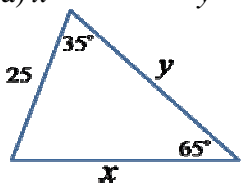
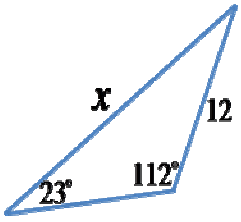
Name:_____ Date:_____

Pre-Calculus 11: Lesson 5 HW Sine Law

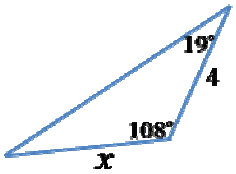
1. Given each equation, solve for all values of θ where $0 \le \theta \le 180^\circ$

a) $\sin\theta = 0.25$	b) $\sin\theta = 0.85$	c) $\sin\theta = \frac{\sqrt{3}}{2}$	d) $\sin\theta = \frac{\sqrt{2}}{2}$
e) $\sin\theta = 1.2$	f) $\sin\theta = -0.25$	g) $\sin\theta = 0$	h) $\sin\theta = 1$

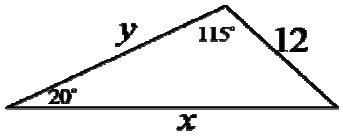
2. Given each triangle, find the value of any missing side or angle "x" and "y". Show all your work

a) $x =$ $y =$ 	b) $x =$ 

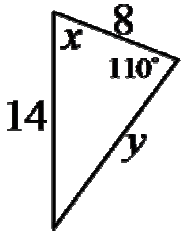
c) x =



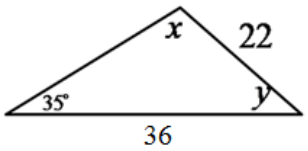
d) x = y =

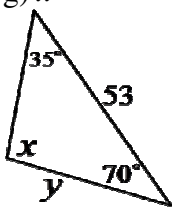
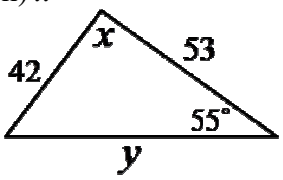


e) x = y =



f) x = y =

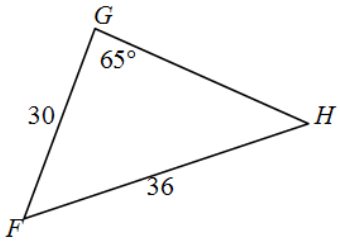


g) x = y = 	h) x = y = 

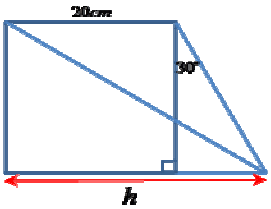
3. Given that $a = 14cm$, $b = 18cm$, and $\angle A = 41^\circ$, find the area of $\triangle ABC$.

4. Given that $a = 14cm$, $\angle B = 70^\circ$, and $\angle A = 35^\circ$, find the area of $\triangle ABC$.

5. Find the value of angle “F”



6. Calculate the length of “x” to 1 decimal place



7. An observer is looking at a mountain peek at an angle of elevation of 35degrees. He walks 250meters towards the mountain and the angle of elevation to the peak is 39degrees. What is the height of the mountain?