Pre-Calculus Chapter 5 Review Name _____

Complete all work and place all answers on another sheet of paper.

1) Find two angles between -360 and 360 degrees that are co-terminal with an angle that has a measure of 1253°40'52". Write the negative angle in degrees minutes seconds and the positive angle in degrees decimals (round to the nearest hundredth of a degree)

2) Suppose triangle ABC is a right triangle with angle C the right angle, a = 12 and b = 30. Also suppose $\overline{CD} \perp \overline{AB}$ where D is on $\overline{AB}$. Find the following

a) cos A as an exact value in simplest radical form
b) c to the nearest hundredth
c) A in degrees minutes seconds (to the nearest second)
d) The length of $\overline{CD}$ to the nearest tenth

3) Suppose θ is an angle with (-6, -10) on its terminal side. Find the following.

a) cos θ exactly in simplest radical form
b) sin θ exactly in simplest radical form
c) the value of θ to the nearest tenth of a degree

4) Find the following exactly in simplest radical form

a) sin (-240°) b) tan (210°) c) cos (225°)

5) Suppose you have two triangles ABC where A = 45° 21' 53", a = 14.3, and b = 18.2 .

a) For the triangle with an acute angle B, find B and C in degrees minutes seconds (to the nearest second) and c to the nearest tenth.
b) Fro the triangle with an obtuse angle B, find B and C to the nearest tenth of a degree and c to the nearest tenth.

6) Find the area of ΔDEF if D = 47.3° , e = 37.6 and d = 29.8. Give the answer to the nearest hundredth.

7) In ΔGHJ let G = 56.7° , j = 18.3 and h = 21.5. Find the following.

a) g to the nearest tenth
b) J to the nearest tenth of a degree

8) In ΔABC a = 14.7, b = 18.1 and c = 20.9. Find the following

a) B in degrees minutes seconds (to the nearest second)
b) The area of the triangle to the nearest hundredth.

9) Suppose point D is on the side opposite angle B in ΔABC. If the area of ΔABC is 18.26 square units when c = 12, the length of the segment from angle A to point D is 5 units, and a = 14 then find C to the nearest tenth of a degree (if more than one angle is possible state both answers).