Accel Precalc Unit 5 Test Review Name _____

Units 5: Introduction to Trig

1. Sketch angles in standard position. Determine quadrant in which the terminal sides lies and name 2 coterminal angles (positive and negative).
   a) 48° b) $\frac{-4\pi}{3}$ c) 400°

2. Convert degree to π radians and decimal radians. a) 200° b) -25° c) 116°

3. Convert π radians to degrees. a) $\frac{3\pi}{5}$ b) $\frac{-11\pi}{12}$

4. Convert decimal degrees to degree, minutes, seconds. a) 86.25° b) -183.716°

5. Convert degrees, minutes, seconds to decimal degrees. a) 21°18' b) 203°5'34"

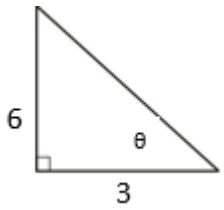
6. Find arc length or measure of central angle of a circle. a) r = 5", θ = 60° b) r = 17", *s* = 25.5"

7. Calculate linear and angular speed. Use problems on handout for notes and Practice Worksheets #1 & 2.

8. State exact ratios of all 6 trig functions for special triangles 30° – 60° – 90° and 45° – 45° – 90°. Also know these ratios when angle measures are given in π radians.

9. Use graphing or scientific calculator to approximate ratios and angle measures for all 6 trig functions. See Practice Worksheet for calculator.

10. Find exact value of all 6 trig functions for θ.



11. Sketch a triangle to represent $\tan\theta = \frac{2}{3}$ and then find the other 5 trig functions of θ.

12. If $\cos\theta = \frac{3\sqrt{10}}{10}$ and $\tan\theta = \frac{1}{3}$, find: a) $\cot\theta$ b) $\tan\left(\frac{\pi}{2} - \theta\right)$ c) $\cot(90° - \theta)$ d) $\sec\theta$

    e) $\csc(90° - \theta)$ f) $\sin(90° - \theta)$

13. Solve for missing parts of right triangle ΔABC where ∡C = 90°. a) $\measuredangle B = 28°15'$, c = 15 b) a = 6, b = 5

14. Know how to solve real-world applications problems using right triangle trig. Use handout for notes and Practice Worksheets 1 & 2.

Go over all in class examples, daily grades, homework problems, and quizzes.