Pre-Calculus **Name _____**
Review Ch. 4.1-4.3, 5.5-5.6

Convert to degrees or radians. Round to the nearest hundredth where necessary.

1) 2 radians

2) 82 degrees

Assume that θ is an acute angle in a right triangle satisfying the given conditions. Evaluate the remaining trigonometric functions.

3) $\sec\theta = \frac{17}{5}$ $\sin\theta =$ _____ $\cos\theta =$ _____ $\tan\theta =$ _____

$\csc\theta =$ _____ $\cot\theta =$ _____

Find the 6 trig functions for an angle whose terminal side contains the given point.

4) (-5, -5)

$\sin\theta =$ _____ $\cos\theta =$ _____ $\tan\theta =$ _____

$\csc\theta =$ _____ $\cot\theta =$ _____

Identify in which quadrant the angle is located.

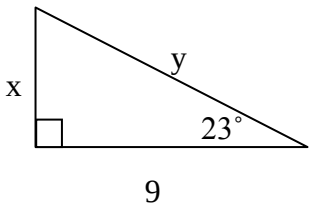
5) $\tan\theta > 0,\ \sin\theta < 0$

6) $\csc\theta > 0, \sec\theta > 0$

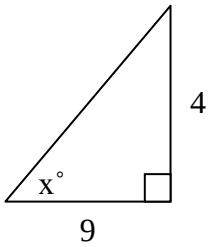
7) $\cot\theta < 0, \cos\theta < 0$

Solve for the variables shown.

8)



9)



10) Find a positive and negative angle that are coterminal with the angle $\theta = \frac{2\pi}{3}$.

NO Calculator. Find the trigonometric ratio.

11) $\sin\frac{3\pi}{4}$

12) $\cos\frac{\pi}{2}$

13) $\sec\left(-\frac{7\pi}{6}\right)$

14) $\tan\pi$

15) $\sin\left(\frac{11\pi}{6}\right)$

16) $\cot\frac{5\pi}{4}$

Solve the triangle. Then find the area of the triangle. Round to the nearest hundredth. If there are two triangles, you must solve each of them.

17) $\Delta ABC,\ m\angle A = 48°,\ b = 10,\ c = 4$

18) $\Delta DOG,\ m\angle D = 100°,\ m\angle O = 24°,\ d = 6$

19) $\Delta CAT,\ m\angle C = 40°,\ a = 8,\ c = 4$

20) $\Delta HAT,\ m\angle H = 50°,\ a = 12,\ h = 10$

Find the bearing. Compass rose will be given.

21) NNW

22) SE

23) ENE