

**GPS PreCalculus**  
**WS 3.6 Intro to Trig Practice**

Name \_\_\_\_\_

**NO CALCULATORS**

**Complete the following table:**

Degrees	$0^\circ$		$45^\circ$	$90^\circ$		
Radians ( $\theta$ )		$\frac{\pi}{6}$			$\frac{2\pi}{3}$	$\frac{7\pi}{4}$
$\sin \theta$						
$\cos \theta$						
$\tan \theta$						

**Evaluate the following:**

1)  $\csc 135^\circ$  \_\_\_\_\_      2)  $\tan \frac{5\pi}{4}$  \_\_\_\_\_      3)  $\cos(-60^\circ)$  \_\_\_\_\_

4)  $\cot \frac{3\pi}{2}$  \_\_\_\_\_      5)  $\sec\left(-\frac{7\pi}{6}\right)$  \_\_\_\_\_      6)  $\sin \frac{13\pi}{4}$  \_\_\_\_\_

7)  $\tan(-135^\circ)$  \_\_\_\_\_      8)  $\cos \pi$  \_\_\_\_\_      9)  $\sec(-7\pi)$  \_\_\_\_\_

10)  $\sec\left(-\frac{\pi}{2}\right)$  \_\_\_\_\_      11)  $\cos\left(\frac{11\pi}{2}\right)$  \_\_\_\_\_      12)  $\tan\left(-\frac{\pi}{3}\right)$  \_\_\_\_\_

13)  $\sin\left(-\frac{7\pi}{6}\right)$  \_\_\_\_\_      14)  $\cot(-150^\circ)$  \_\_\_\_\_      15)  $\csc(-\pi)$  \_\_\_\_\_

16. Find the reference angle, 1 positive, and 1 negative coterminal angle.

a.  $\theta = 322^\circ$                       b.  $\theta = \frac{17\pi}{6}$                       c.  $\theta = -1.72$

17) State the quadrant in which  $\theta$  lies.

a.  $\sin \theta > 0$  and  $\cos \theta < 0$  \_\_\_\_\_

b.  $\sec \theta > 0$  and  $\cot \theta < 0$  \_\_\_\_\_

c.  $\tan \theta > 0$  and  $\csc \theta < 0$  \_\_\_\_\_

18) Find the six trig functions of the angle  $\theta$  (in standard position) whose terminal side passes through the point  $(-2, -4)$ .

$\sin \theta$  \_\_\_\_\_  $\cos \theta$  \_\_\_\_\_

$\tan \theta$  \_\_\_\_\_  $\cot \theta$  \_\_\_\_\_

$\sec \theta$  \_\_\_\_\_  $\csc \theta$  \_\_\_\_\_

19) Find the six trig functions of the angle  $\theta$  (in standard position) whose terminal side passes through the point  $(5, -12)$ .

$\sin \theta$  \_\_\_\_\_  $\cos \theta$  \_\_\_\_\_

$\tan \theta$  \_\_\_\_\_  $\cot \theta$  \_\_\_\_\_

$\sec \theta$  \_\_\_\_\_  $\csc \theta$  \_\_\_\_\_

20) Find the remaining five trig functions of  $\theta$  satisfying the given conditions.

$\tan \theta = \frac{-12}{7}, \quad \sin \theta < 0$

$\sin \theta$  \_\_\_\_\_  $\cos \theta$  \_\_\_\_\_

$\sec \theta$  \_\_\_\_\_  $\csc \theta$  \_\_\_\_\_

$\cot \theta$  \_\_\_\_\_