

HW #83 worksheet

1. Let $(-4, 3)$ be a point on a terminal side of θ in standard position. Find all 6 trigonometric functions.

2. Let $(20, -21)$ be a point on a terminal side of θ in standard position. Find all 6 trigonometric functions.

3. Let $(-7, -11)$ be a point on a terminal side of θ in standard position. Find all 6 trigonometric functions.

4. Identify the quadrant θ would be in if:

a. $\sin x = \frac{2}{3}$ & $\sec x < 0$

b. $\tan \theta = 2$ & $\cos \theta < 0$

c. $\csc x = -\frac{5}{4}$ & $\cot x = \frac{3}{4}$

5. Sketch θ and find the reference angle and draw it for:

a. 122°

b. $\frac{3\pi}{7}$

c. -221°

d. $\frac{9\pi}{5}$

6. Find sine, cosine and tangent of θ for $\theta =$

a. 45°

b. $\frac{3\pi}{2}$

c. $\frac{2\pi}{3}$

d. 330°

e. π

7. Find all $\theta \in [0^\circ, 360^\circ]$ *this means 1 full rotation around the unit circle

a. $\sin \theta = -\frac{\sqrt{2}}{2}$

b. $\cos \theta = \frac{\sqrt{3}}{2}$

c. $\tan \theta = 0$

d. $\sec \theta = -2$

8. For the problems in 7 find all $\theta \in [0, 2\pi]$ *this means 1 full rotation around the unit circle

