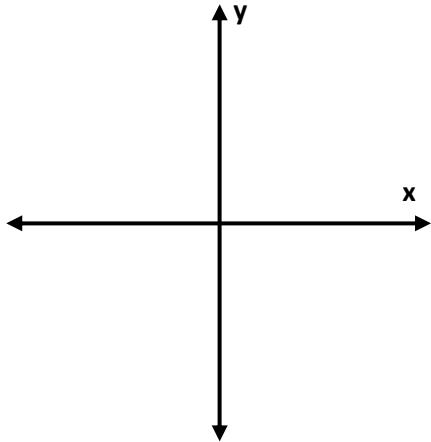


Pg. 312 4.4B – Trigonometric Functions of Any Angle

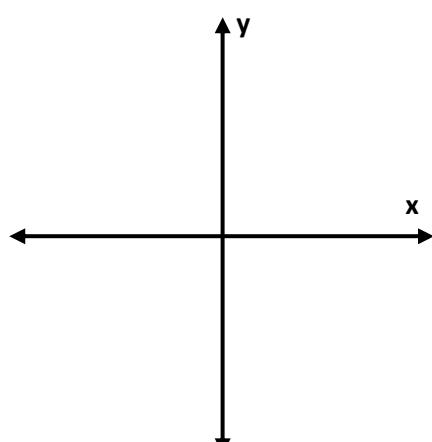
Ex 1:

State the quadrant in which θ lies.

a) $\sin \theta < 0$ and $\cos \theta < 0$



b) $\sec \theta > 0$ and $\cot \theta < 0$



Ex 2:

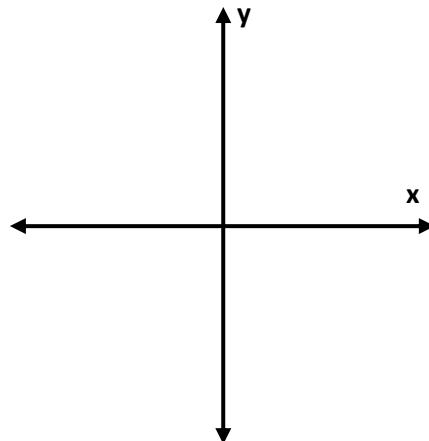
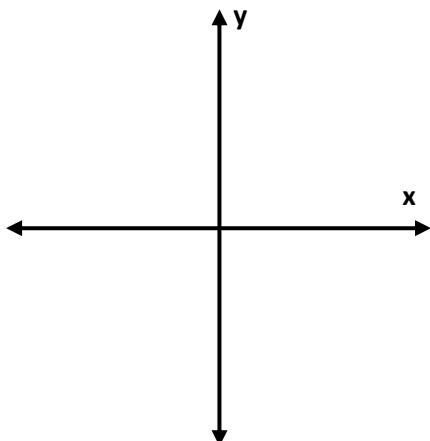
Find the values of the six trigonometric functions of θ with the given constant.

a) Function Value Constraint

$$\cos \theta = \frac{8}{17} \quad \tan \theta < 0$$

b) Function Value Constraint

$$\tan \theta \text{ is undefined} \quad \pi \leq \theta \leq 2\pi$$



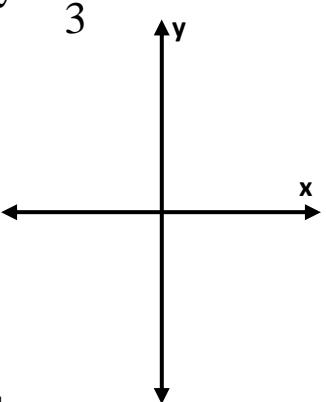
$$\sin \theta = \quad \cos \theta = \quad \tan \theta = \quad \sin \theta = \quad \cos \theta = \quad \tan \theta =$$

$$\csc \theta = \quad \sec \theta = \quad \cot \theta = \quad \csc \theta = \quad \sec \theta = \quad \cot \theta =$$

Ex 3:

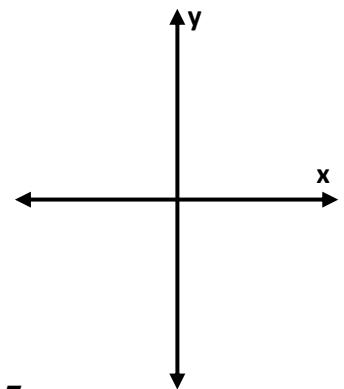
The terminal side of θ lies on the given line in the specified quadrant. Find the values of the six trigonometric functions θ of by finding a point on the line.

Line	Quadrant	$\sin \theta =$	$\cos \theta =$	$\tan \theta =$
$y = \frac{1}{3}x$	III			
		$\csc \theta =$	$\sec \theta =$	$\cot \theta =$


Ex 4:

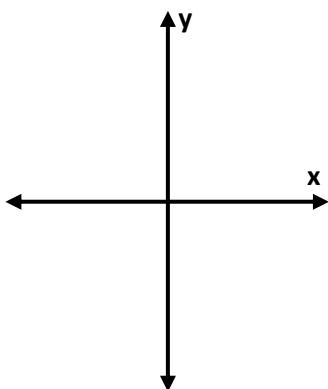
Find the indicated trigonometric value in the specified quadrant.

Function	Quadrant	Trigonometric Value
$\cot \theta = -3$	II	$\cos \theta$

**Ex 5:**

Find two solutions of the equation. Give your answers in degrees and in radians.

$$\cos \theta = \frac{\sqrt{2}}{2}$$

**Assignment 4.4B**

Pg. 318 **REQUIRED:** Problem Set #'s 11-27 ODD, 59-85 ODD