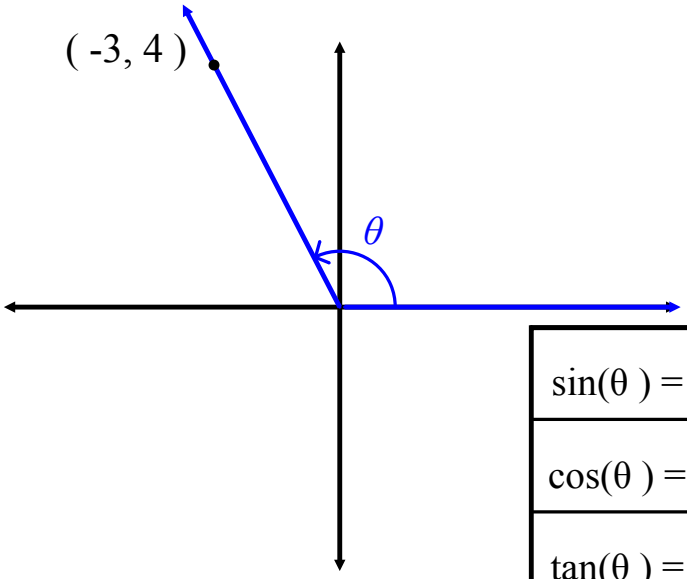
Algebra II

12-3

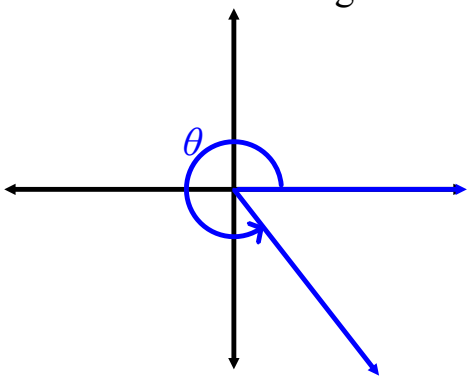
Trigonometric Functions of General Angles

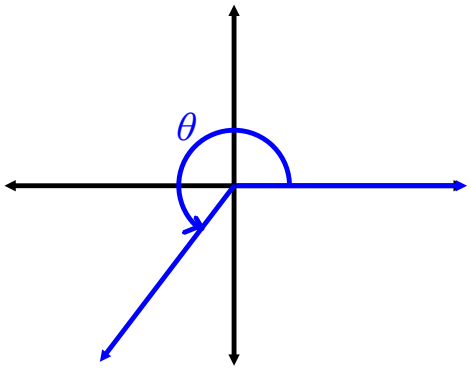
Find the values of the six trigonometric functions for the angle in standard position with the terminal side through point (-3, 4).

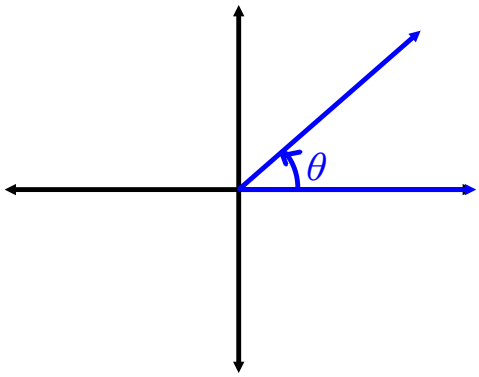


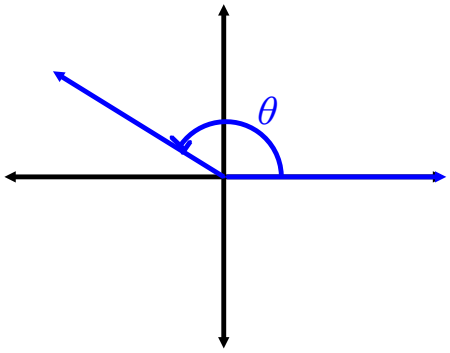
sin(θ) =		csc(θ) =	
cos(θ) =		sec(θ) =	
tan(θ) =		cot(θ) =	

Draw the reference angle for each angle θ in standard position.
Label each reference angle α.









Find the measure of the reference angle α of the given angle θ.

9) $\theta = 233^\circ$

Find the exact value of the six trigonometric functions of each angle.

37) 330°

sin(θ) =		csc(θ) =	
cos(θ) =		sec(θ) =	
tan(θ) =		cot(θ) =	

First, give the quadrant of angle θ. Then find the five other trigonometric function of θ.

45) $\cos\theta = {}^{-8}/_{17}$, $0^\circ < \theta < 180^\circ$

sin(θ) =		csc(θ) =	
cos(θ) =		sec(θ) =	
tan(θ) =		cot(θ) =	

Complete the table. If any value is undefined, so state.

5) $\theta = 0^\circ$

sin(θ) =		csc(θ) =	
cos(θ) =		sec(θ) =	
tan(θ) =		cot(θ) =	

Name all angles θ, $0^\circ \le \theta < 360^\circ$, that make the statement true.

61) $\cos\theta = -\frac{\sqrt{3}}{2}$

Assignment:
Pg. 566
1-4 all, 6-24 even,
38-52 even, 60-66 even