

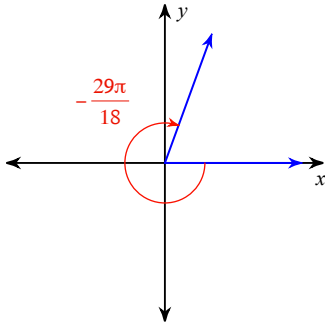
## 8-3 HW: Extending Trig Functions Beyond Right Triangles

1) Use the point  $(-12, 5)$  to evaluate the six trigonometric functions of the angle.

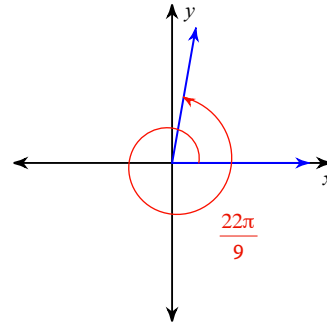
2) Use the point  $(-4, -3)$  to evaluate the six trigonometric functions of the angle.

**Find the reference angle.**

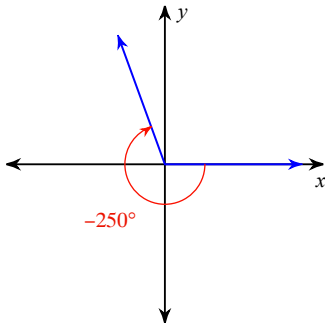
3)



4)



5)



6)  $-\frac{37\pi}{12}$

7)  $-\frac{23\pi}{18}$

8)  $\frac{35\pi}{18}$

**Find the exact value of each trigonometric function without using your calculator or unit circle.**

9)  $\sin -300^\circ$

10)  $\cos -495^\circ$

11)  $\sin 150^\circ$

12)  $\sec 225^\circ$

13)  $\csc \frac{17\pi}{4}$

14)  $\tan -\frac{11\pi}{4}$

15)  $\cot -\frac{17\pi}{6}$

16)  $\sec -\frac{7\pi}{4}$

17)  $\csc 180^\circ$

18)  $\tan 480^\circ$