

## Trig Ratios of Any Angle

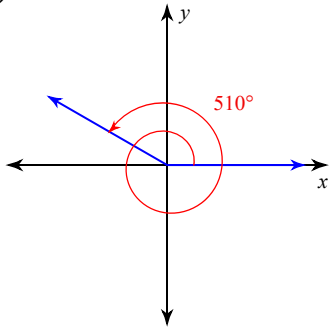
Use a calculator to find each. Round your answers to the nearest ten-thousandth.

1)  $\sec -195^\circ$

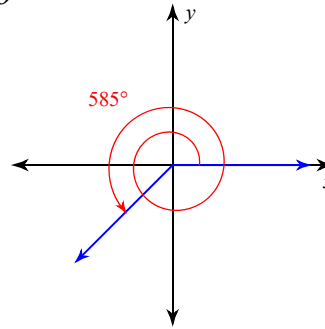
2)  $\cos \frac{13\pi}{12}$

Find the exact value of each trigonometric function.

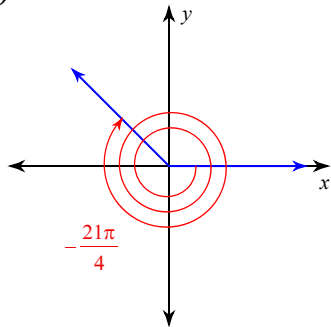
3)  $\sin \theta$



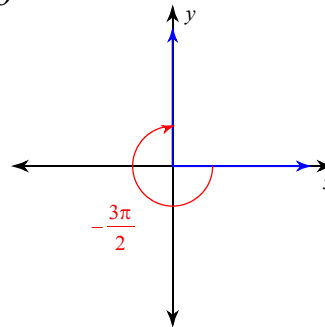
4)  $\cos \theta$



5)  $\tan \theta$



6)  $\cos \theta$



7)  $\cos \frac{17\pi}{4}$

8)  $\cos -810^\circ$

9)  $\cos \frac{9\pi}{4}$

10)  $\sin \frac{15\pi}{4}$

11)  $\sin -\frac{9\pi}{4}$

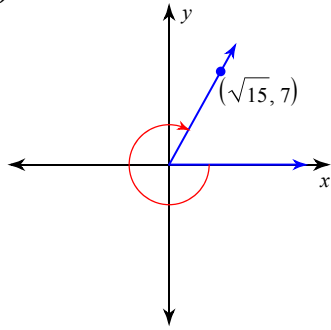
12)  $\tan -945^\circ$

13)  $\sin -720^\circ$

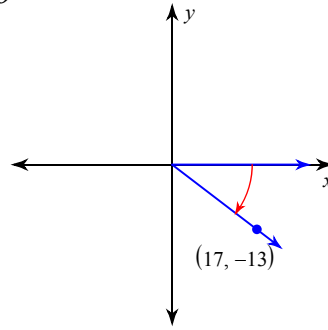
14)  $\cos \frac{4\pi}{3}$

Use the given point on the terminal side of angle  $\theta$  to find the value of the trigonometric function indicated.

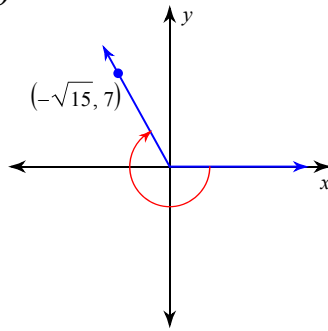
15)  $\sin \theta$



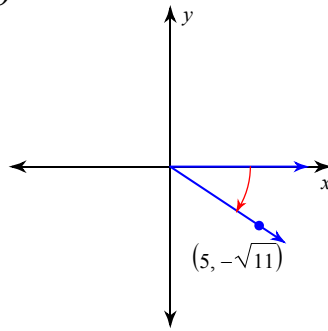
16)  $\cot \theta$



17)  $\sec \theta$



18)  $\sin \theta$



Find the exact values of the five trigonometric ratios not given.

19)  $\cot \theta = -\sqrt{7}$  and  $\sin \theta > 0$

20)  $\cos \theta = \frac{24}{25}$  and  $\sin \theta < 0$

21)  $\sin \theta = -\frac{2\sqrt{5}}{5}$  and  $\cos \theta > 0$

22)  $\tan \theta = -5$  and  $\cos \theta > 0$

23)  $\csc \theta = \frac{3\sqrt{7}}{7}$  and  $\cos \theta < 0$

24)  $\sec \theta = 2$  and  $\sin \theta < 0$