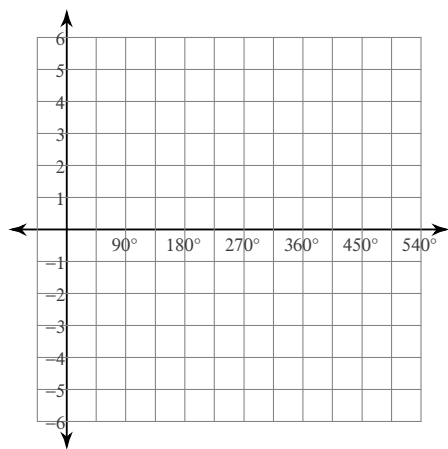


## Translating Graphs of Trig Functions

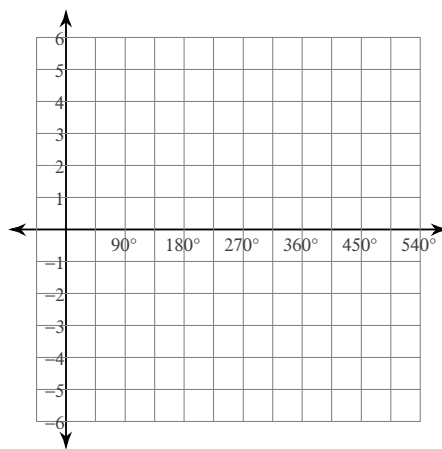
Date \_\_\_\_\_ Period \_\_\_\_\_

Using degrees, find the amplitude and period of each function. Then graph.

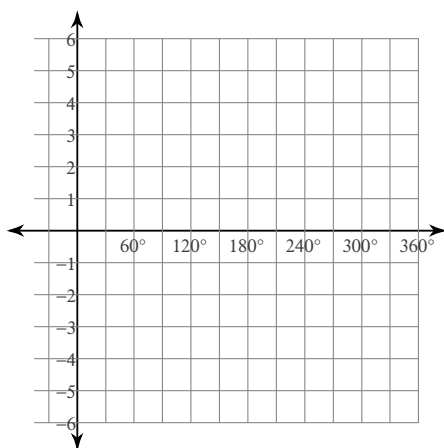
1)  $y = \sin(\theta - 135)$



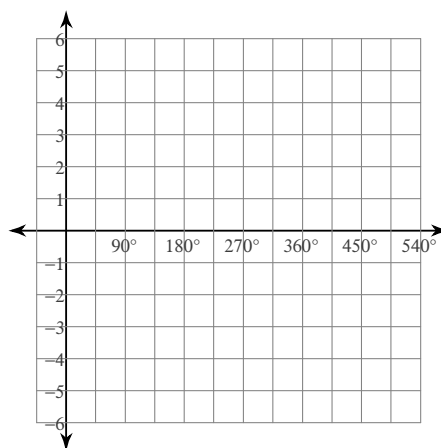
2)  $y = \cos(\theta - 30)$



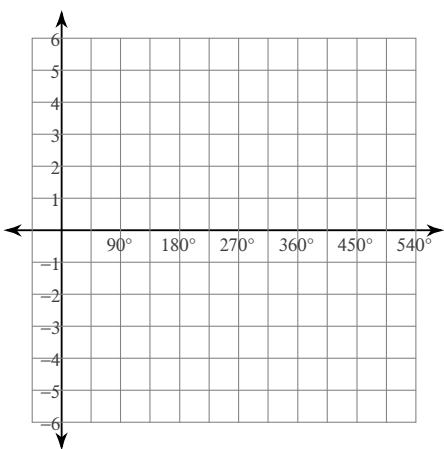
3)  $y = -2 + \tan \theta$



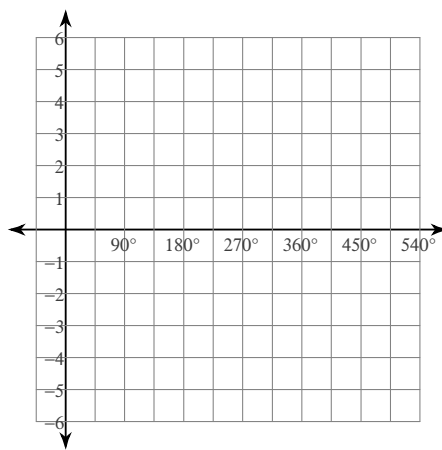
4)  $y = 1 + \sin \theta$



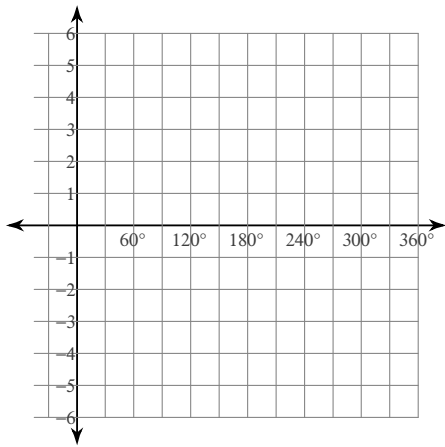
5)  $y = 2 + \frac{1}{2} \csc(\theta - 135)$



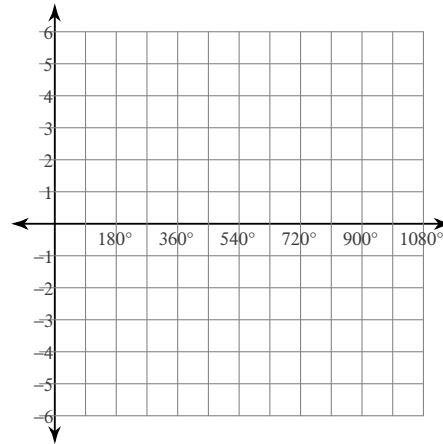
6)  $y = 2 + 4 \cos(\theta + 90)$



7)  $y = 1 + \cot(2\theta - 90)$

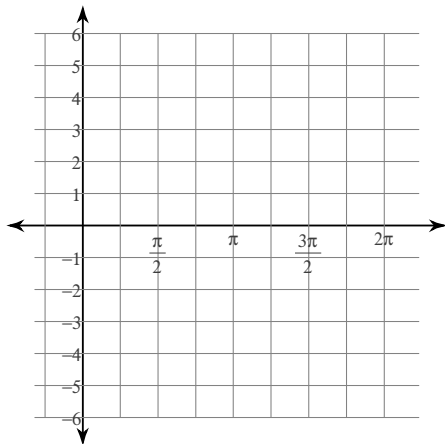


8)  $y = 1 + \sec\left(\frac{\theta}{2} - 135\right)$

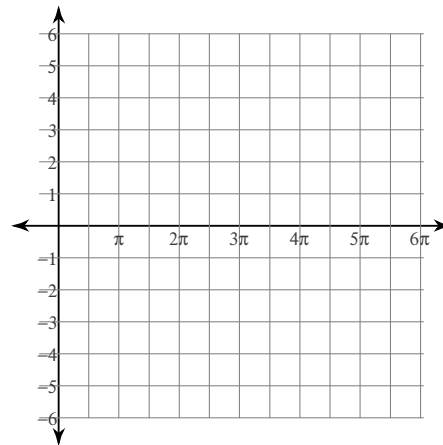


Using radians, find the amplitude and period of each function. Then graph.

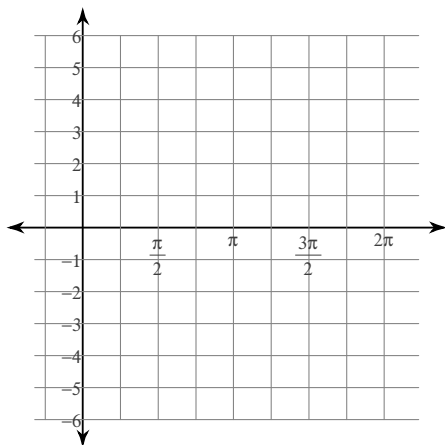
9)  $y = \frac{1}{2}\sin\left(3\theta + \frac{\pi}{4}\right) + 1$



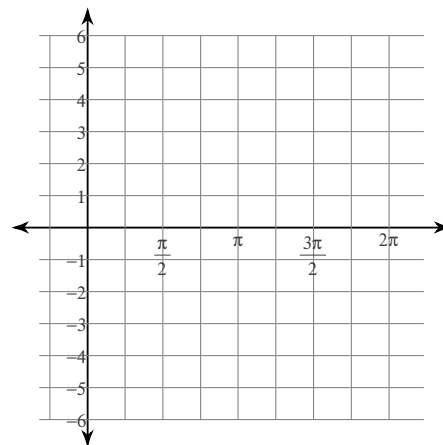
10)  $y = 3\sec\left(\frac{\theta}{2} - \frac{5\pi}{6}\right) - 2$



11)  $y = 4\cos\left(2\theta - \frac{5\pi}{6}\right) - 2$



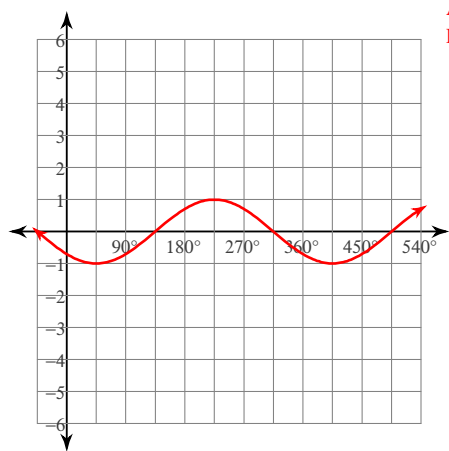
12)  $y = \frac{1}{2}\tan\left(2\theta - \frac{5\pi}{3}\right) + 1$



# Translating Graphs of Trig Functions

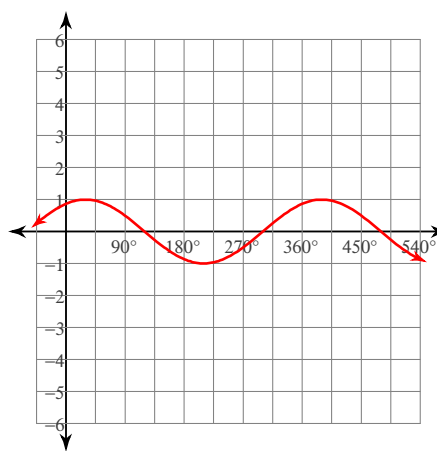
Using degrees, find the amplitude and period of each function. Then graph.

1)  $y = \sin(\theta - 135)$



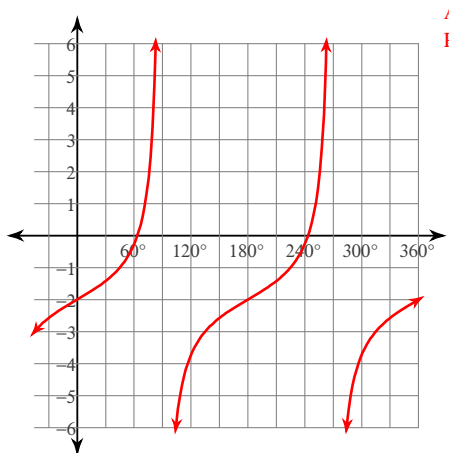
Amplitude: 1  
Period: 360°

2)  $y = \cos(\theta - 30)$



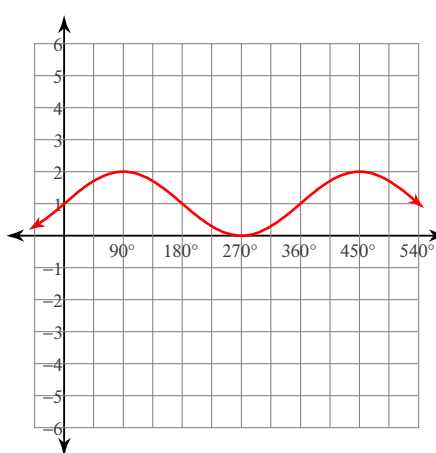
Amplitude: 1  
Period: 360°

3)  $y = -2 + \tan \theta$



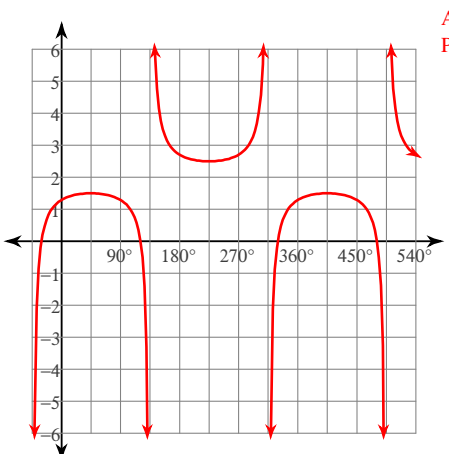
Amplitude: None  
Period: 180°

4)  $y = 1 + \sin \theta$



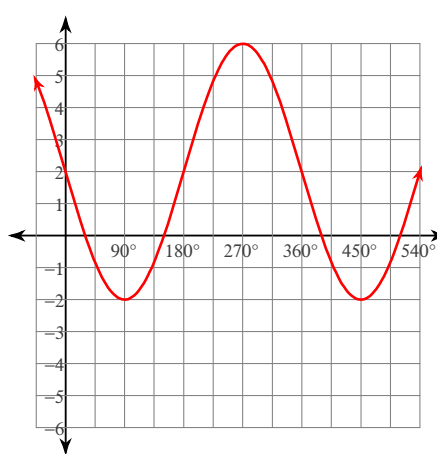
Amplitude: 1  
Period: 360°

5)  $y = 2 + \frac{1}{2} \csc(\theta - 135)$



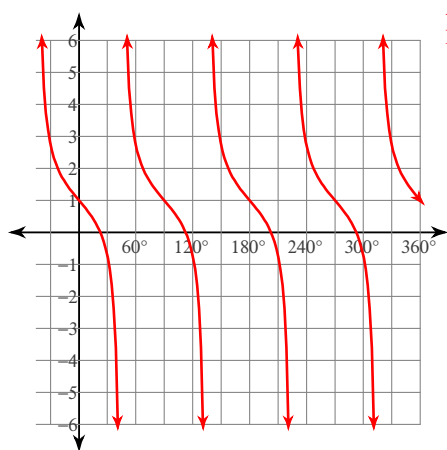
Amplitude: None  
Period: 360°

6)  $y = 2 + 4 \cos(\theta + 90)$



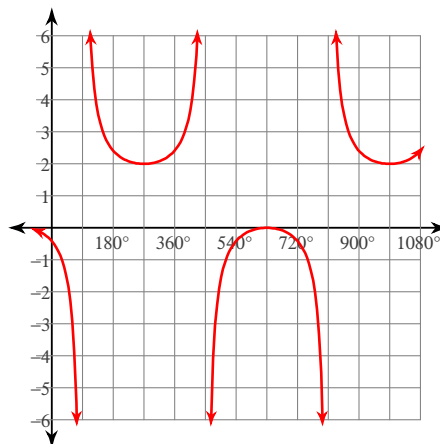
Amplitude: 4  
Period: 360°

7)  $y = 1 + \cot(2\theta - 90)$



Amplitude: None  
Period:  $90^\circ$

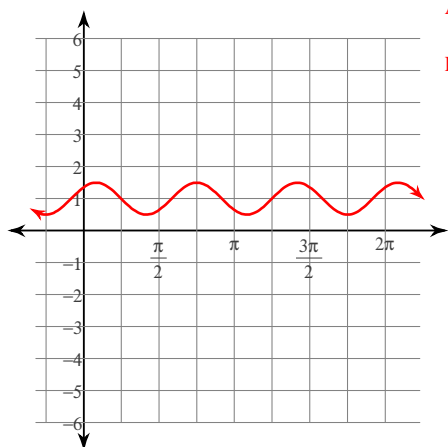
8)  $y = 1 + \sec\left(\frac{\theta}{2} - 135\right)$



Amplitude: None  
Period:  $720^\circ$

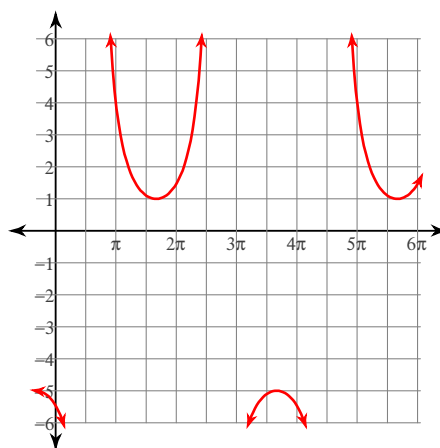
Using radians, find the amplitude and period of each function. Then graph.

9)  $y = \frac{1}{2}\sin\left(3\theta + \frac{\pi}{4}\right) + 1$



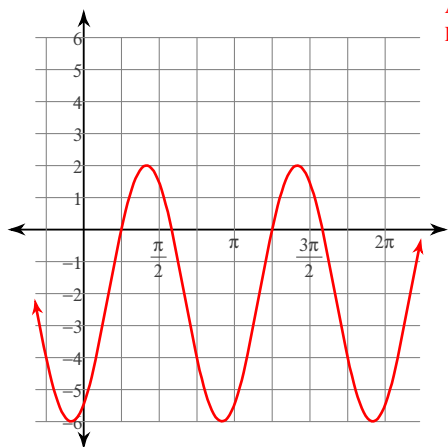
Amplitude:  $\frac{1}{2}$   
Period:  $\frac{2\pi}{3}$

10)  $y = 3\sec\left(\frac{\theta}{2} - \frac{5\pi}{6}\right) - 2$



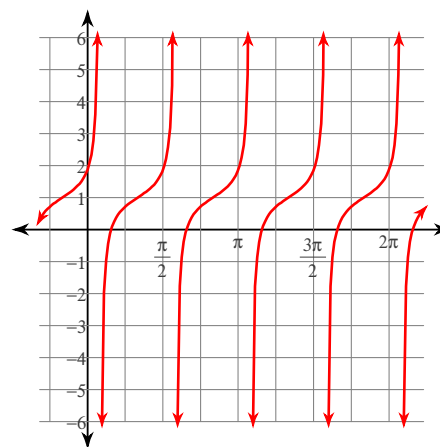
Amplitude: None  
Period:  $4\pi$

11)  $y = 4\cos\left(2\theta - \frac{5\pi}{6}\right) - 2$



Amplitude: 4  
Period:  $\pi$

12)  $y = \frac{1}{2}\tan\left(2\theta - \frac{5\pi}{3}\right) + 1$



Amplitude: None  
Period:  $\frac{\pi}{2}$