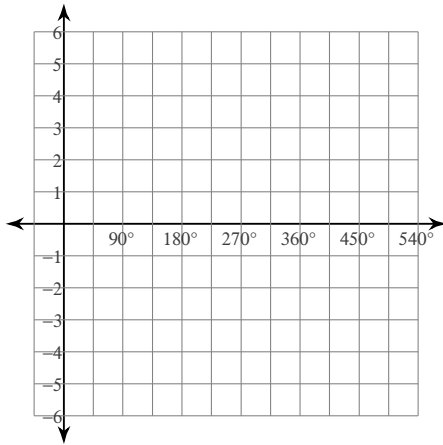


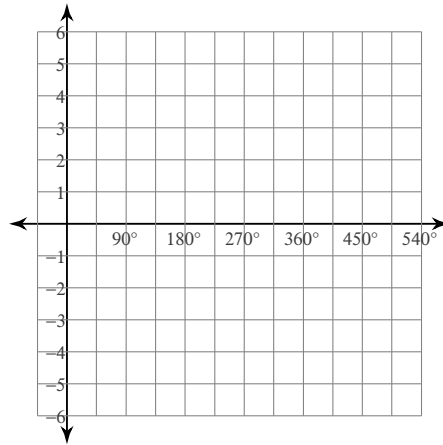
Translating Graphs of Trig Functions

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

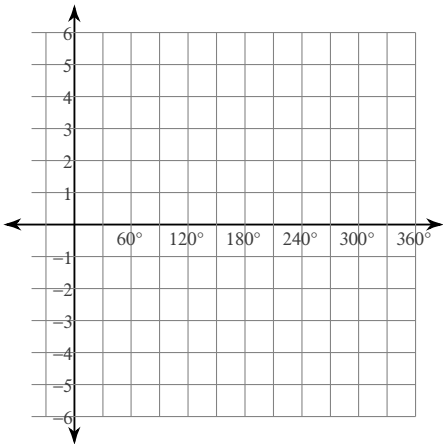
1) $y = \sin(\theta - 135)$



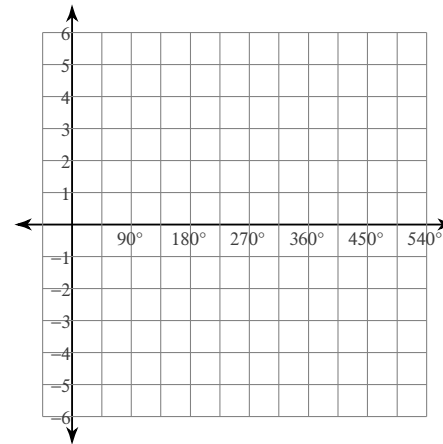
2) $y = \cos(\theta - 30)$



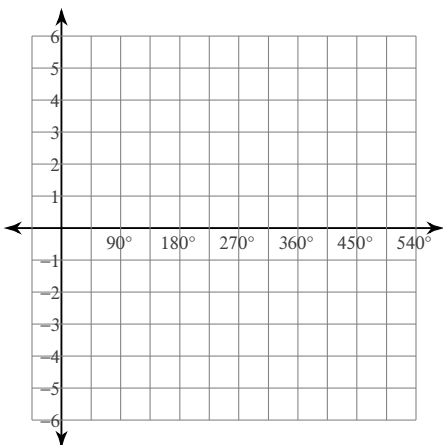
3) $y = -2 + \tan \theta$



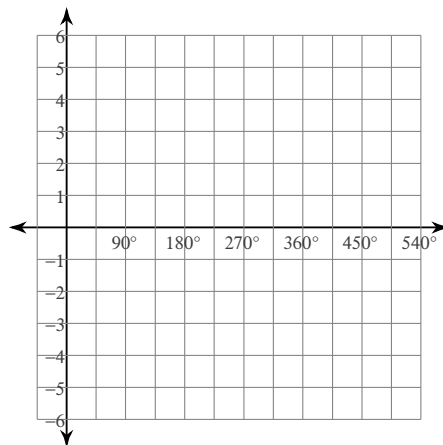
4) $y = 1 + \sin \theta$



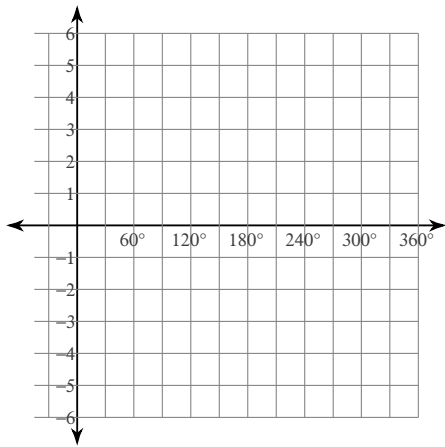
5) $y = 2 + \frac{1}{2} \csc(\theta - 135)$



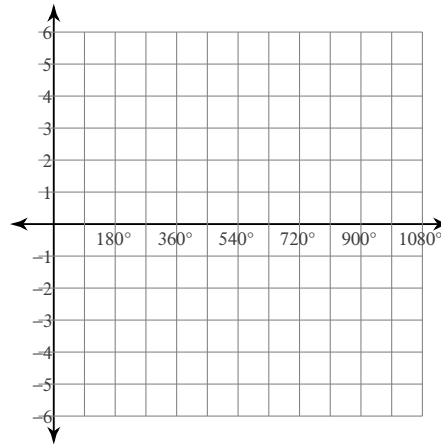
6) $y = 2 + 4\cos(\theta + 90)$



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

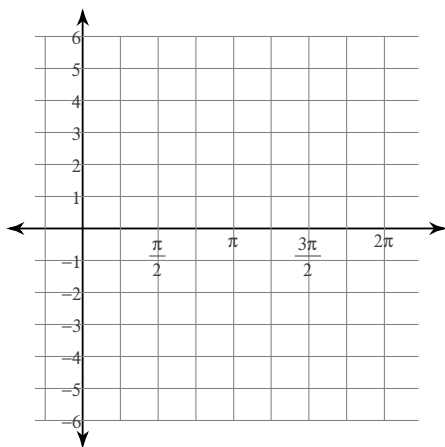


8) $y = 1 + \sec\left(\frac{\theta}{2} - 135\right)$

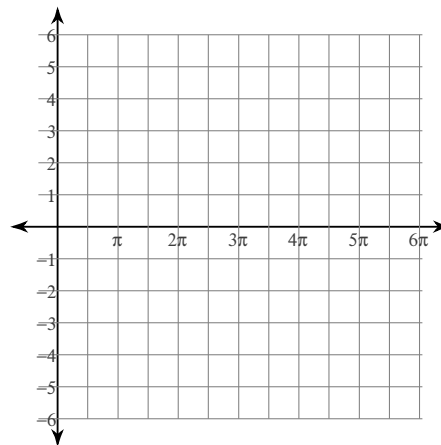


Using radians, find the amplitude and period of each function. Then graph.

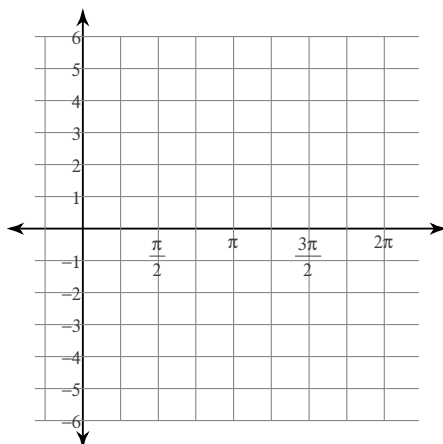
9) $y = \frac{1}{2} \sin\left(3\theta + \frac{\pi}{4}\right) + 1$



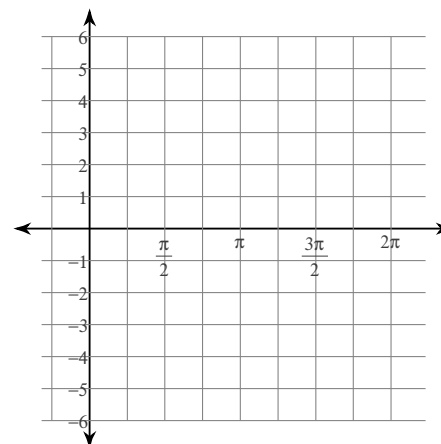
10) $y = 3\sec\left(\frac{\theta}{2} - \frac{5\pi}{6}\right) - 2$



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



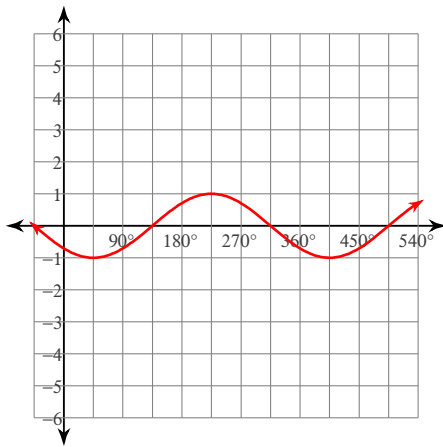
12) $y = \frac{1}{2} \tan\left(2\theta - \frac{5\pi}{3}\right) + 1$



Translating Graphs of Trig Functions

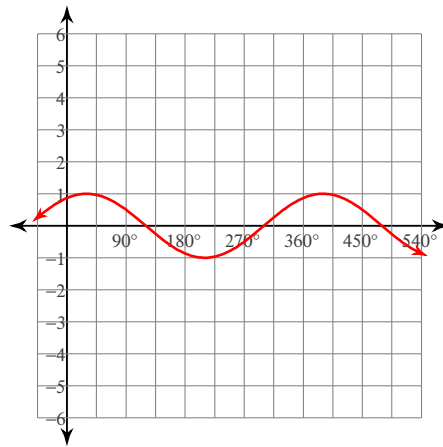
Using degrees, find the amplitude and period of each function. Then graph.

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



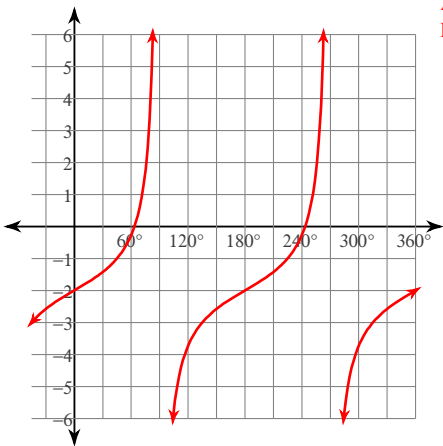
Amplitude: 1
Period: 360°

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



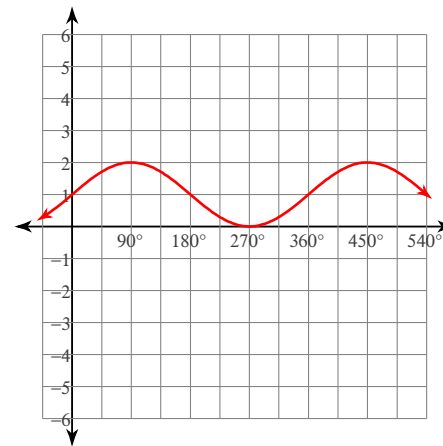
Amplitude: 1
Period: 360°

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



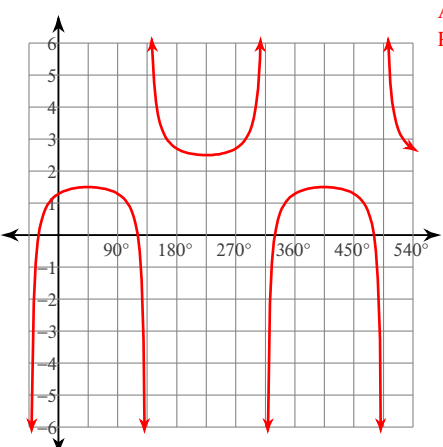
Amplitude: None
Period: 180°

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



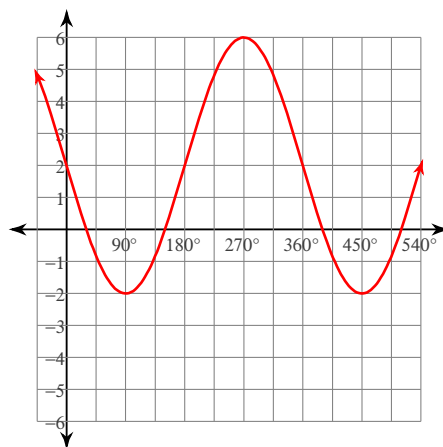
Amplitude: 1
Period: 360°

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



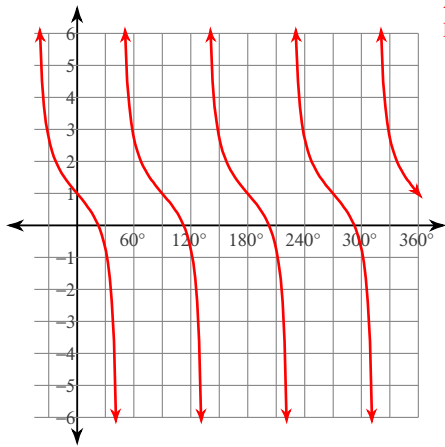
Amplitude: None
Period: 360°

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



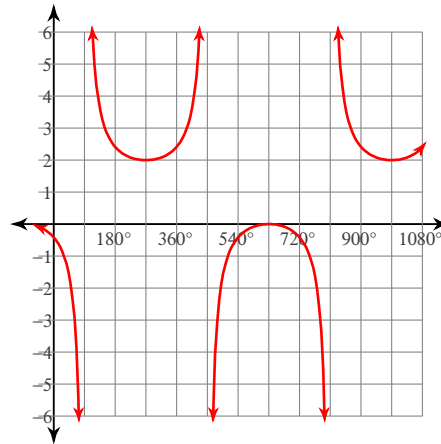
Amplitude: 4
Period: 360°

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



Amplitude: None
Period: 90°

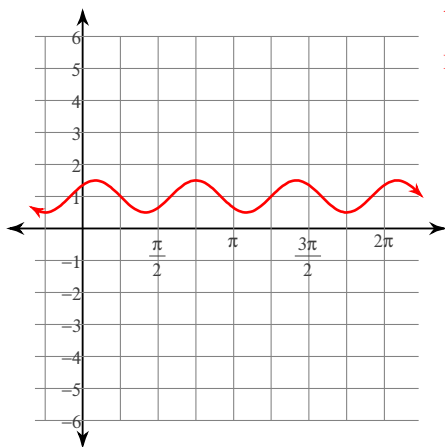
$$8) y = 1 + \sec\left(\frac{\theta}{2} - 135^\circ\right)$$



Amplitude: None
Period: 720°

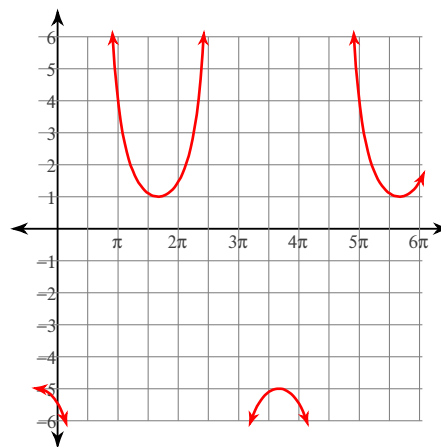
Using radians, find the amplitude and period of each function. Then graph.

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



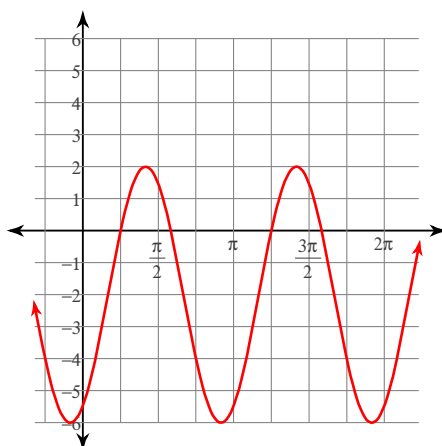
Amplitude: $\frac{1}{2}$
Period: $\frac{2\pi}{3}$

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



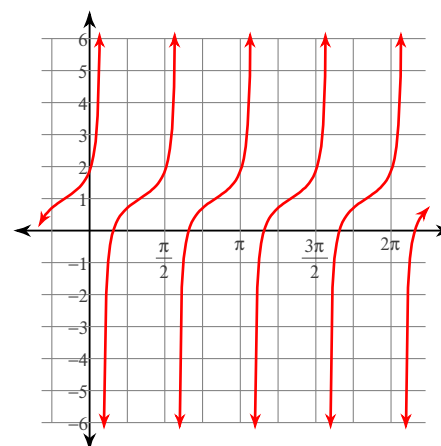
Amplitude: None
Period: 4π

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



Amplitude: 4
Period: π

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



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