

Graphing Trig Functions 1

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

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

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

3) $y = -2 + \sec\frac{\theta}{2}$

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

5) $y = \csc\frac{\theta}{3} - 2$

6) $y = 3\csc\left(2\theta + \frac{\pi}{3}\right) - 1$

7) $y = \frac{1}{2} \cdot \tan 2\theta - 2$

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

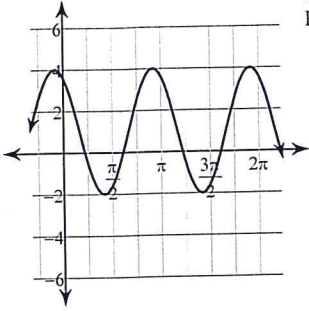
9) $y = 2\cot\frac{\theta}{3} - 2$

10) $y = 1 + \frac{1}{2} \cdot \cot\left(\theta - \frac{3\pi}{4}\right)$

Answers to Graphing Trig Functions 1

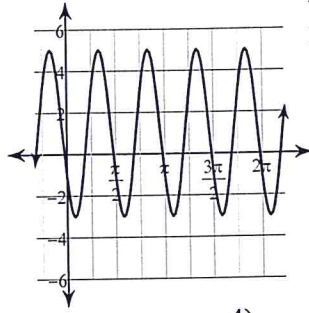
1)

Amplitude: 3
Period: π



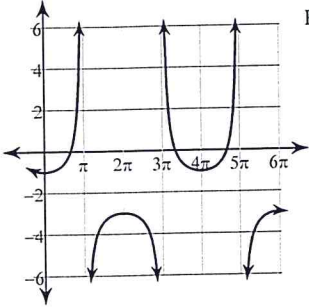
2)

Amplitude: 4
Period: $\frac{\pi}{2}$



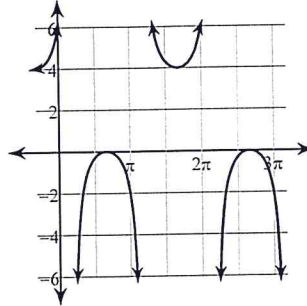
3)

Amplitude: None
Period: 4π



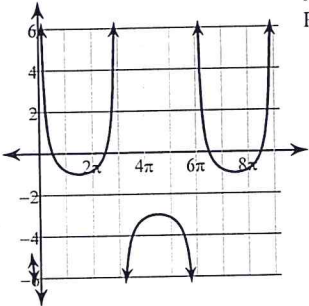
4)

Amplitude: None
Period: 2π



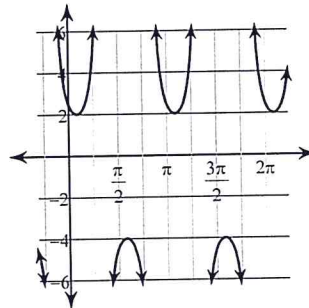
5)

Amplitude: None
Period: 6π



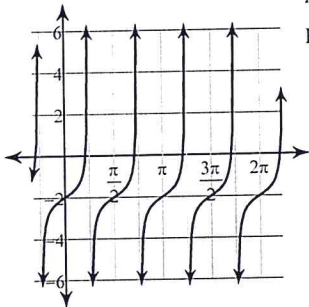
6)

Amplitude: None
Period: π



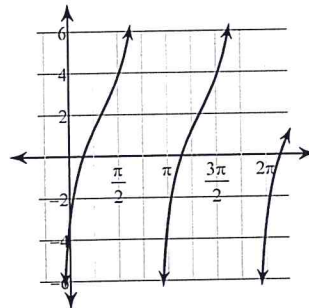
7)

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



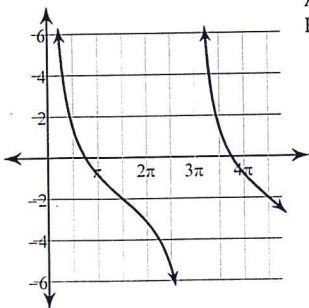
8)

Amplitude: None
Period: π



9)

Amplitude: None
Period: 3π



10)

Amplitude: None
Period: π

