

Graphing Sine/Cosine Trig Functions WS #1

Date _____ Period _____

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

1) $y = 4\sin 3\theta$

2) $y = 3\cos 3\theta$

3) $y = 3\sin 2\theta$

4) $y = \sin 2\theta$

5) $y = 3\cos \frac{\theta}{3}$

6) $y = \frac{1}{2} \cdot \sin 2\theta$

7) $y = 2\cos 3\theta$

8) $y = \frac{1}{2} \cdot \cos 2\theta$

9) $y = 2\sin \frac{\theta}{2}$

10) $y = 4\sin 4\theta$

$$11) y = \frac{1}{2} \cdot \cos 3\theta$$

$$12) y = 2\cos \theta$$

$$13) y = \cos 3\theta$$

$$14) y = \frac{1}{2} \cdot \cos 4\theta$$

$$15) y = 2\cos 2\theta$$

$$16) y = 4\cos 2\theta$$

$$17) y = \frac{1}{2} \cdot \cos \frac{\theta}{2}$$

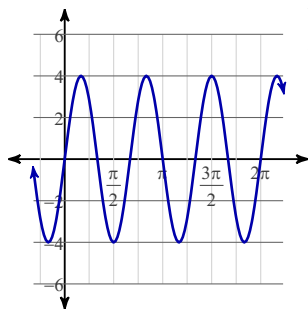
$$18) y = 2\sin 4\theta$$

$$19) y = 4\cos \frac{\theta}{2}$$

$$20) y = 3\sin 3\theta$$

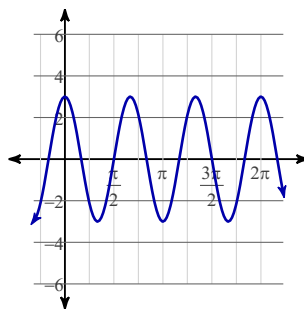
Answers to Graphing Sine/Cosine Trig Functions WS #1

1)



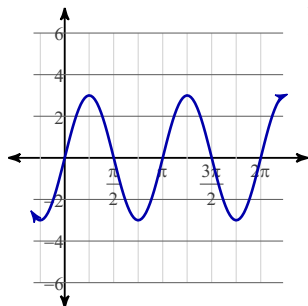
Amplitude: 4
Period: $\frac{2\pi}{3}$

2)



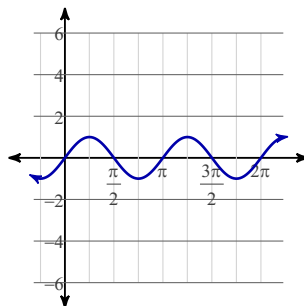
Amplitude: 3
Period: $\frac{2\pi}{3}$

3)



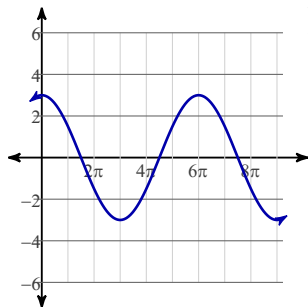
Amplitude: 3
Period: π

4)



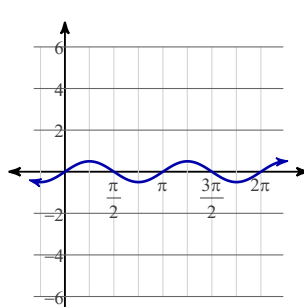
Amplitude: 1
Period: π

5)



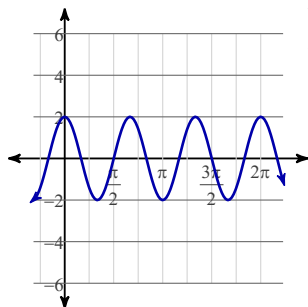
Amplitude: 3
Period: 6π

6)



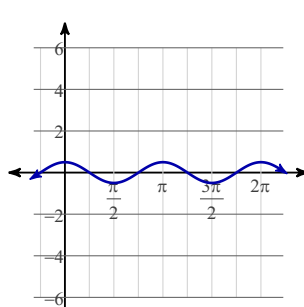
Amplitude: $\frac{1}{2}$
Period: π

7)



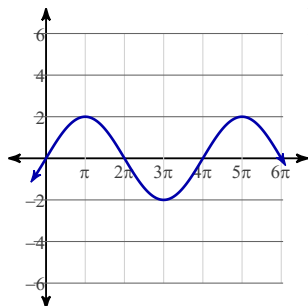
Amplitude: 2
Period: $\frac{2\pi}{3}$

8)



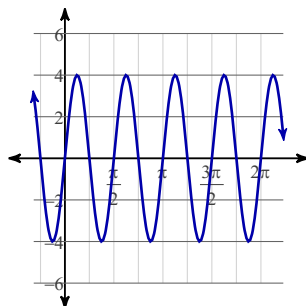
Amplitude: $\frac{1}{2}$
Period: π

9)



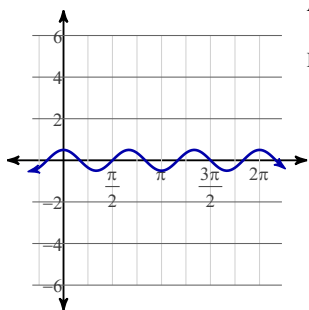
Amplitude: 2
Period: 4π

10)



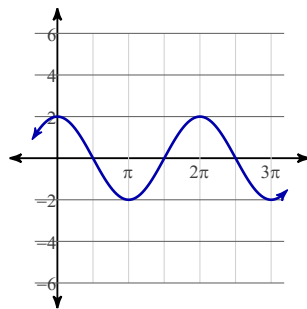
Amplitude: 4
Period: $\frac{\pi}{2}$

11)



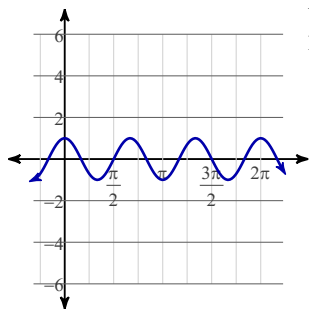
Amplitude: $\frac{1}{2}$
 Period: $\frac{2\pi}{3}$

12)



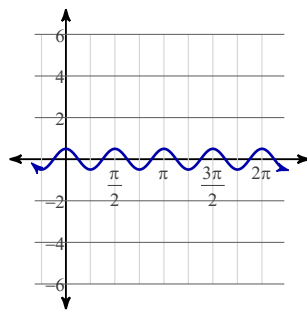
Amplitude: 2
 Period: 2π

13)



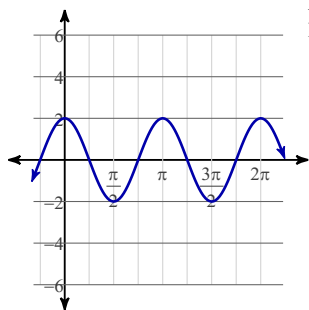
Amplitude: 1
 Period: $\frac{2\pi}{3}$

14)



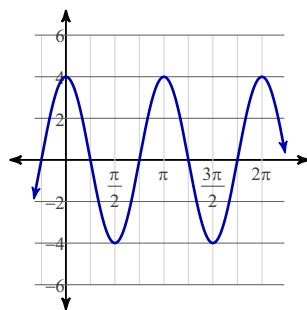
Amplitude: $\frac{1}{2}$
 Period: $\frac{\pi}{2}$

15)



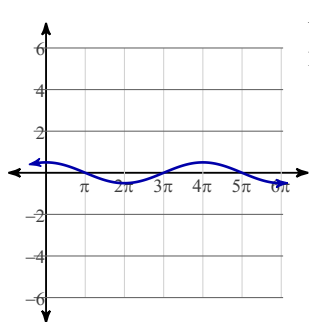
Amplitude: 2
 Period: π

16)



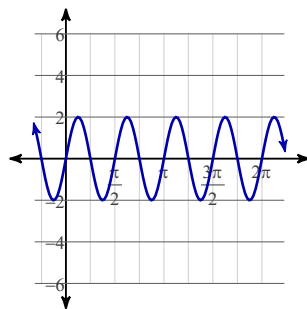
Amplitude: 4
 Period: π

17)



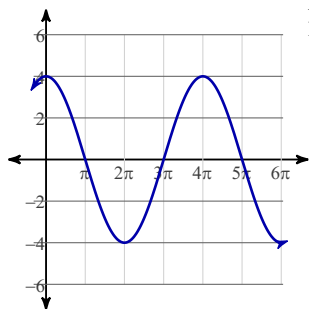
Amplitude: $\frac{1}{2}$
 Period: 4π

18)



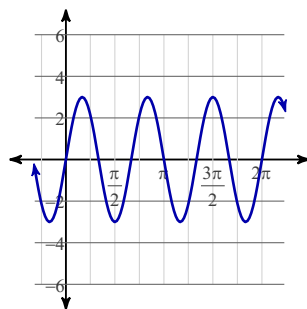
Amplitude: 2
 Period: $\frac{\pi}{2}$

19)



Amplitude: 4
 Period: 4π

20)



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