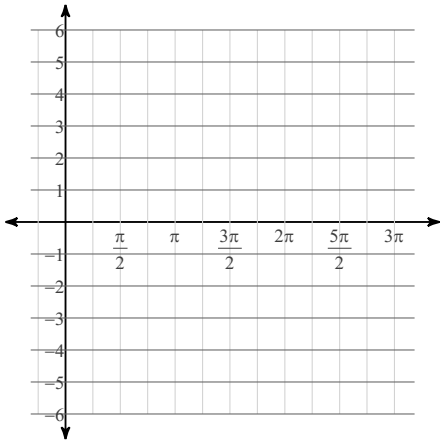
Precalc Name_____

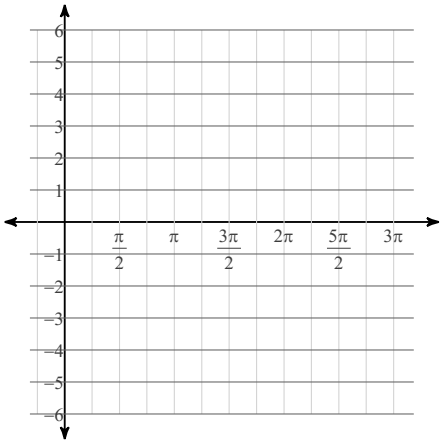
Graphing sine and cosine functions practice (M3 5.4)

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

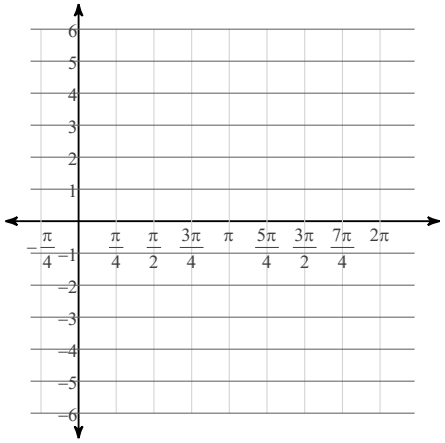
1) $y = 3\cos\theta - 1$



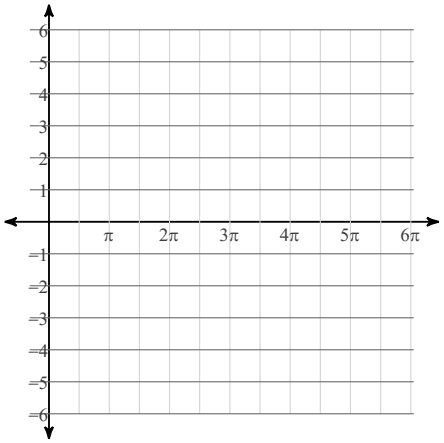
2) $y = 4\cos\theta - 2$



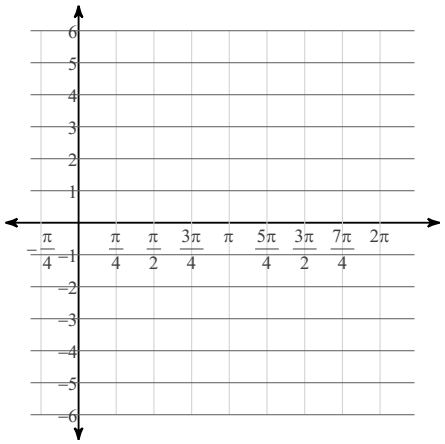
3) $y = 4\sin 4\theta$



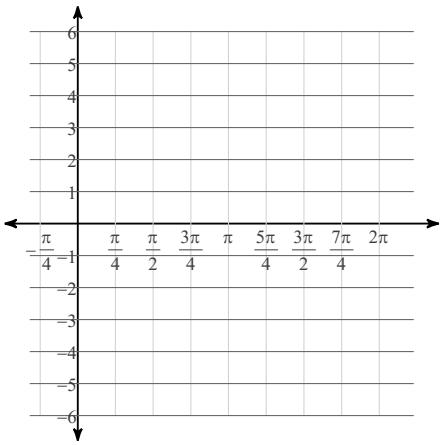
4) $y = 3\sin\dfrac{\theta}{2}$



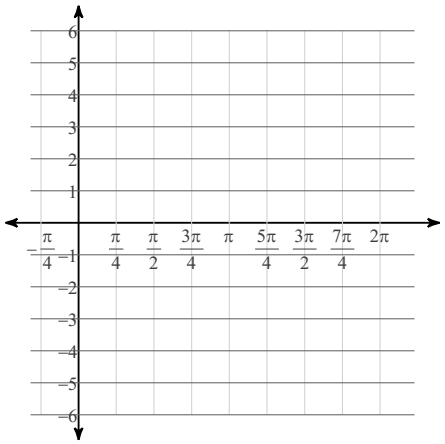
5) $y = -2 + \dfrac{1}{2} \cdot \cos\left(2\theta + \dfrac{\pi}{4}\right)$



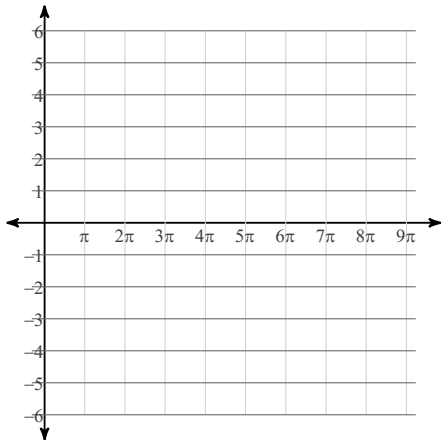
6) $y = 3\cos\left(2\theta - \dfrac{\pi}{6}\right) - 1$



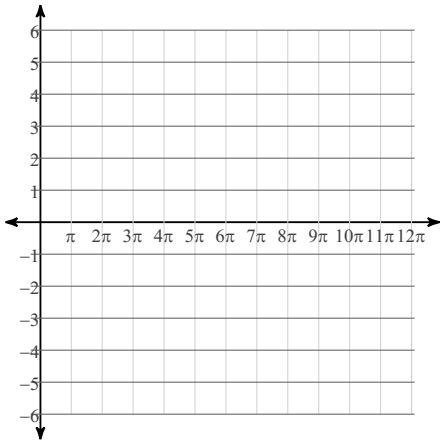
7) $y = 3\cos\left(2\theta + \frac{\pi}{3}\right) - 2$



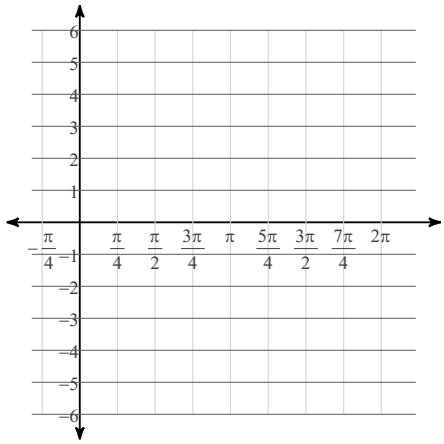
8) $y = \sin\left(\frac{\theta}{3} + \frac{\pi}{2}\right)$



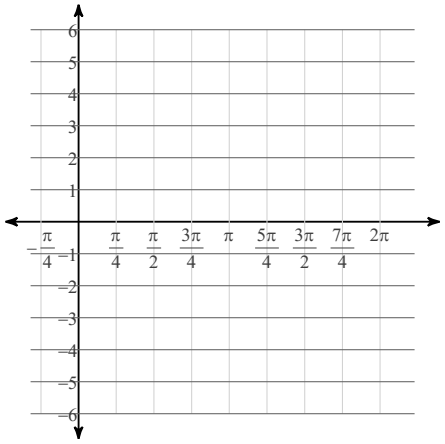
9) $y = 1 + 3\cos\left(\frac{\theta}{4} - \frac{3\pi}{2}\right)$



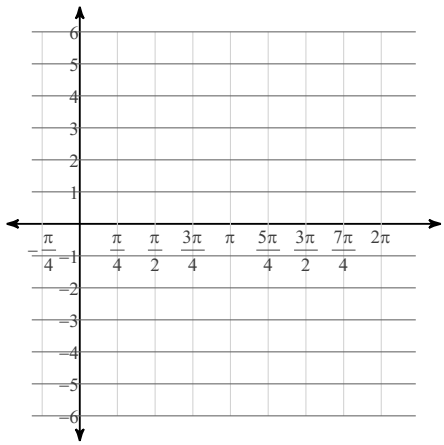
10) $y = \frac{1}{2} \cdot \sin\left(2\theta + \frac{\pi}{6}\right) + 1$



11) $y = 3\cos\left(4\theta + \frac{\pi}{6}\right) + 1$

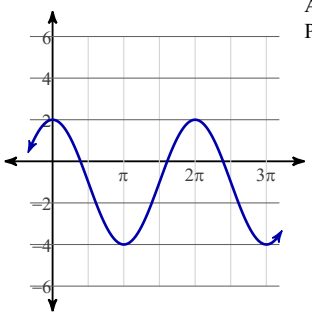


12) $y = \frac{1}{2} \cdot \sin\left(2\theta - \frac{5\pi}{6}\right) + 2$



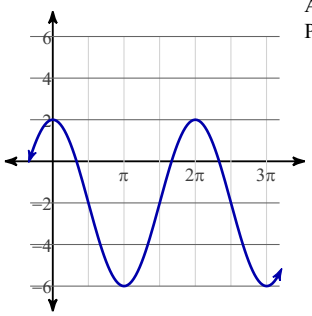
Answers to Graphing sine and cosine functions practice (M3 5.4)

1)



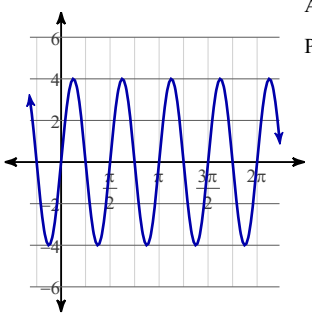
Amplitude: 3
Period: 2π

2)



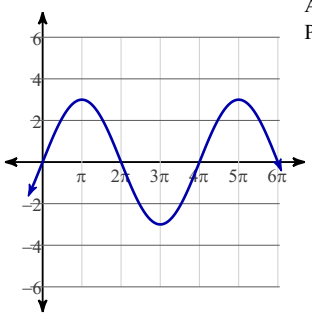
Amplitude: 4
Period: 2π

3)



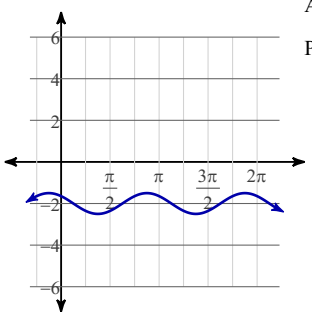
Amplitude: 4
Period: $\frac{\pi}{2}$

4)



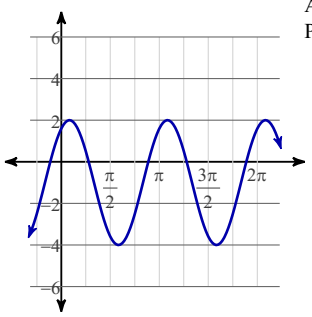
Amplitude: 3
Period: 4π

5)



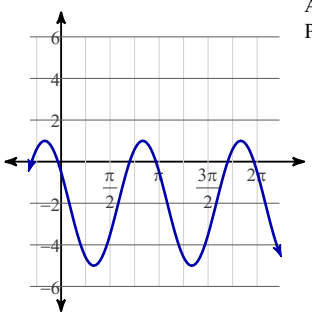
Amplitude: $\frac{1}{2}$
Period: π

6)



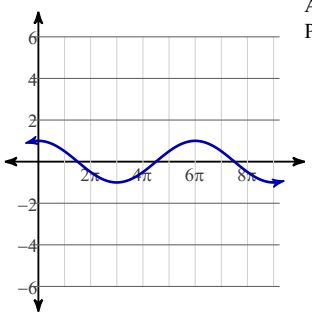
Amplitude: 3
Period: π

7)



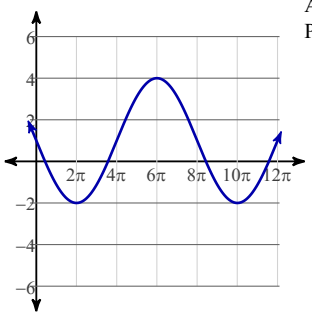
Amplitude: 3
Period: π

8)



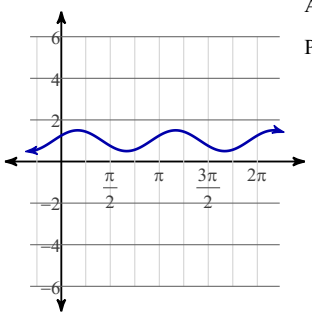
Amplitude: 1
Period: 6π

9)



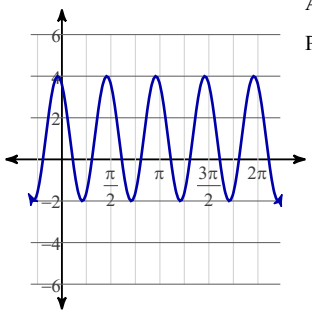
Amplitude: 3
Period: 8π

10)



Amplitude: $\frac{1}{2}$
Period: π

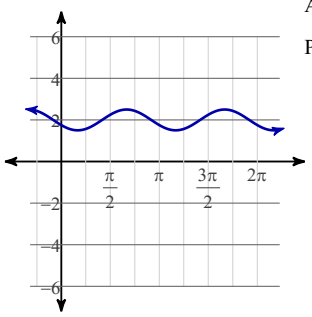
11)



Amplitude: 3

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

12)



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

Period: π