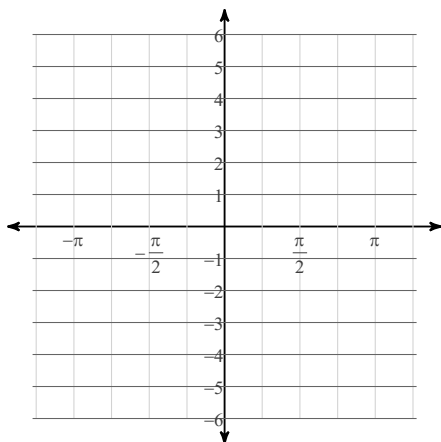


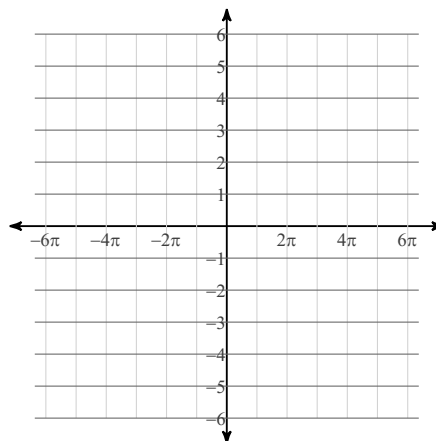
Assignment

Find the amplitude, the period in radians, the phase shift in radians, and the vertical shift. Then sketch the graph using radians.

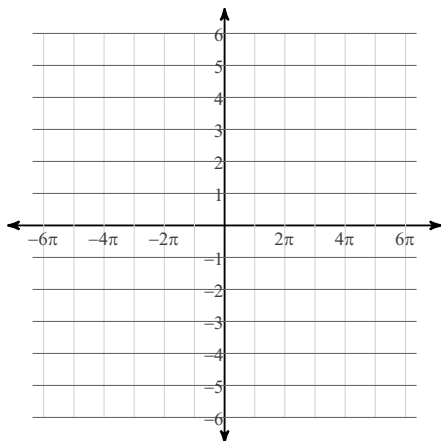
1) $y = 4\sin 3\theta$



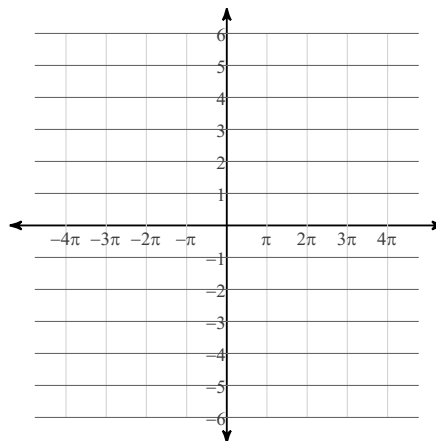
2) $y = \cos \frac{\theta}{4}$



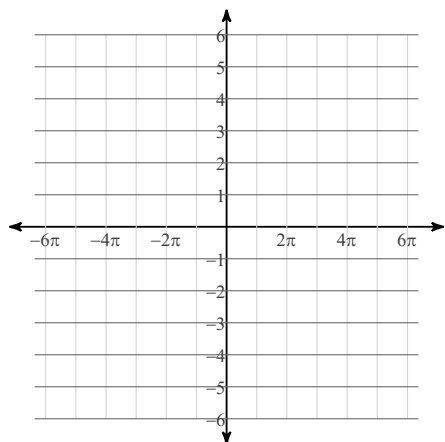
3) $y = 3\cos\left(\frac{\theta}{4} + \frac{3\pi}{4}\right)$



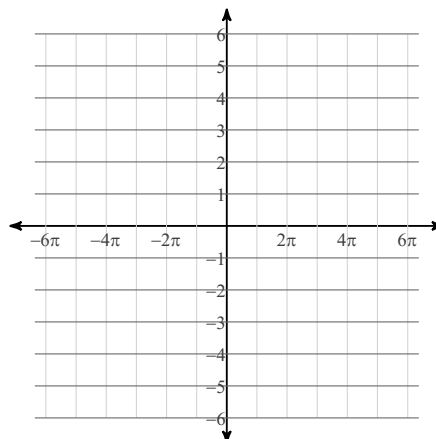
4) $y = 3\cos\left(\frac{\theta}{3} + \frac{\pi}{6}\right)$



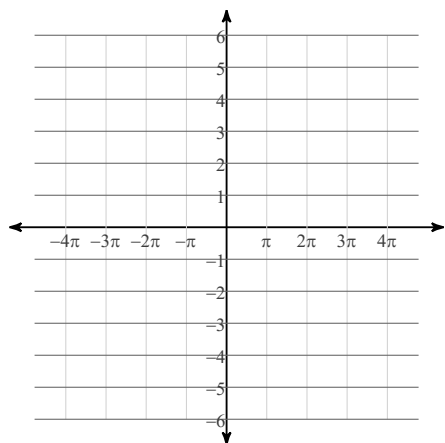
$$5) y = 3\cos \frac{\theta}{4}$$



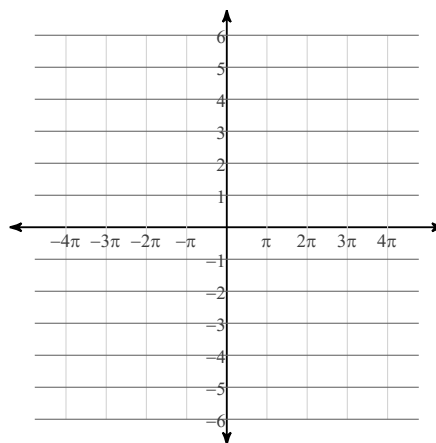
$$6) y = \frac{1}{2} \cdot \sin \left(\frac{\theta}{4} + \frac{3\pi}{4} \right)$$



$$7) y = 4\sin \left(\frac{\theta}{3} + \frac{\pi}{3} \right)$$

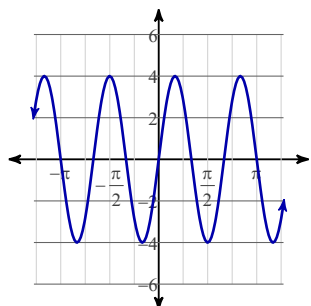


$$8) y = 4\cos \left(\frac{\theta}{3} + \frac{\pi}{4} \right)$$



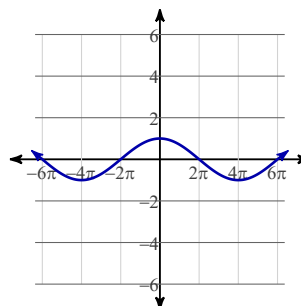
Answers to Assignment (ID: 1)

1)



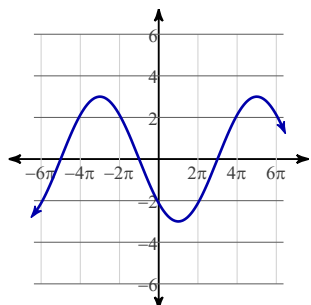
Amplitude: 4
 Period: $\frac{2\pi}{3}$
 Phase shift: None
 Vert. shift: None

2)



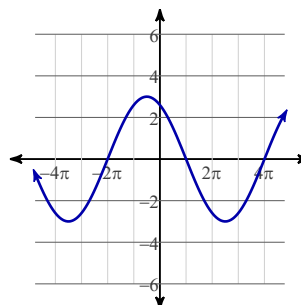
Amplitude: 1
 Period: 8π
 Phase shift: None
 Vert. shift: None

3)



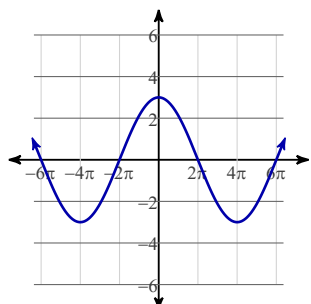
Amplitude: 3
 Period: 8π
 Phase shift: Left 3π
 Vert. shift: None

4)



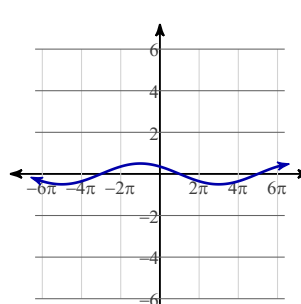
Amplitude: 3
 Period: 6π
 Phase shift: Left $\frac{\pi}{2}$
 Vert. shift: None

5)



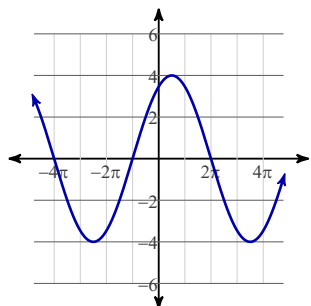
Amplitude: 3
 Period: 8π
 Phase shift: None
 Vert. shift: None

6)



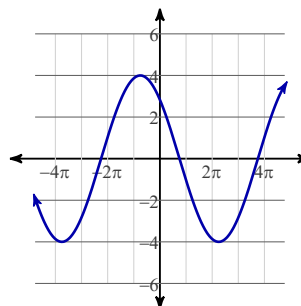
Amplitude: $\frac{1}{2}$
 Period: 8π
 Phase shift: Left 3π
 Vert. shift: None

7)



Amplitude: 4
 Period: 6π
 Phase shift: Left π
 Vert. shift: None

8)



Amplitude: 4
 Period: 6π
 Phase shift: Left $\frac{3\pi}{4}$
 Vert. shift: None