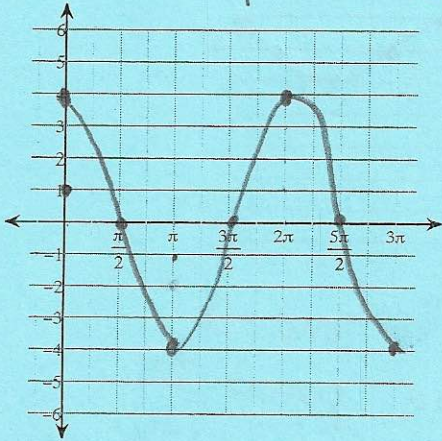


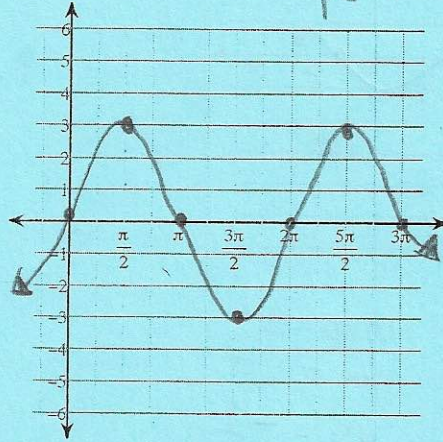
Homework 5-3: Graphing Trig

Find the amplitude and the period in radians. Then sketch the graph using radians.

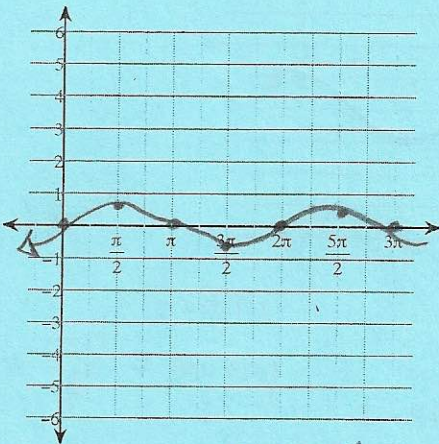
1) $y = 4\cos \theta$ amplitude = 4
period = 2π



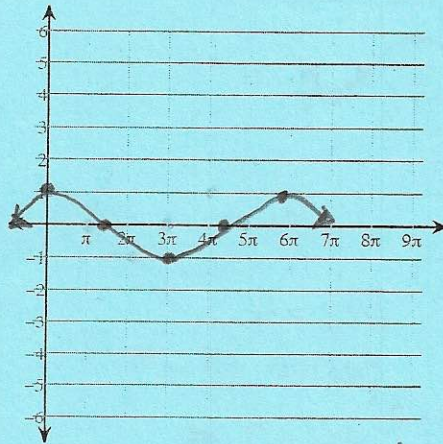
2) $y = 3\sin \theta$ amp = 3
per. = 2π



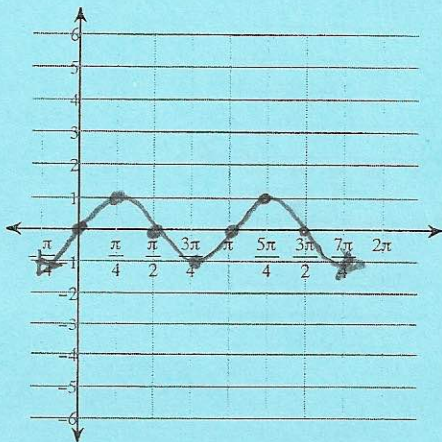
3) $y = \frac{1}{2} \cdot \sin \theta$ amp = $\frac{1}{2}$
period = $\pi/2$



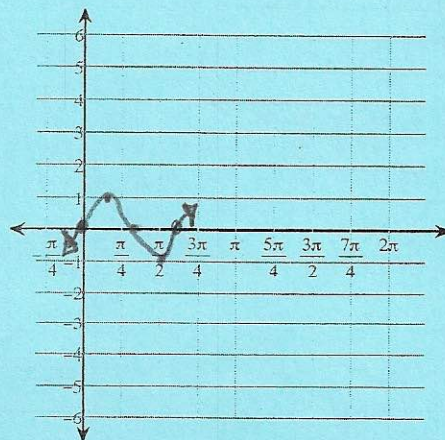
4) $y = \cos \frac{\theta}{3}$ $y = \cos \frac{1}{3}\theta$ amp = 1
period = $\frac{2\pi}{\frac{1}{3}} = 6\pi$



5) $y = \sin 2\theta$ amp = 1
per. = $\frac{2\pi}{2} = \pi$

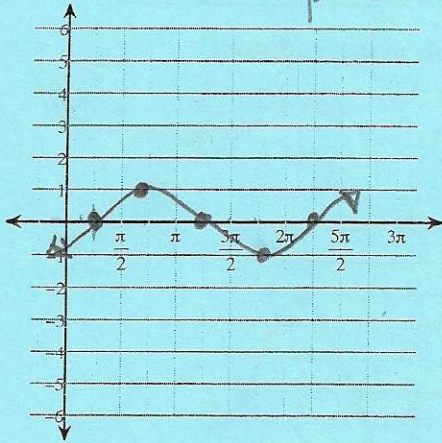


6) $y = \sin 3\theta$ amp = 1
per = $\frac{2\pi}{3}$

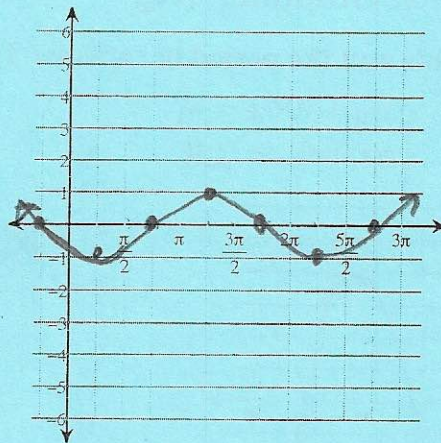


7) $y = \sin\left(\theta - \frac{\pi}{4}\right)$

amp = 1
 per. = 2π
 phase shift $\frac{\pi}{4}$ Right

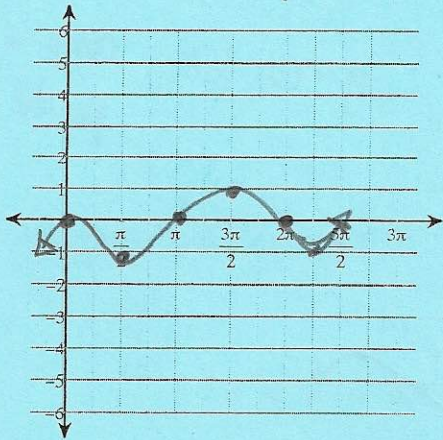


8) $y = \sin\left(\theta - \frac{3\pi}{4}\right)$



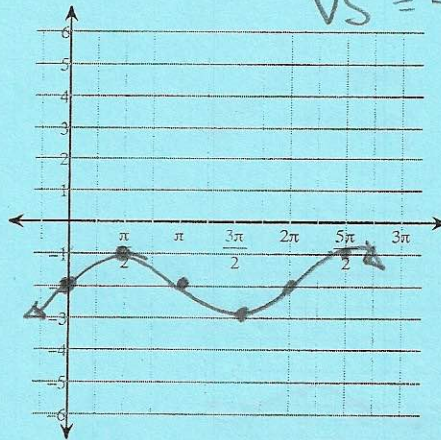
9) $y = \cos \theta - 1$

amp = 1
 per = 2π
 VS = -1



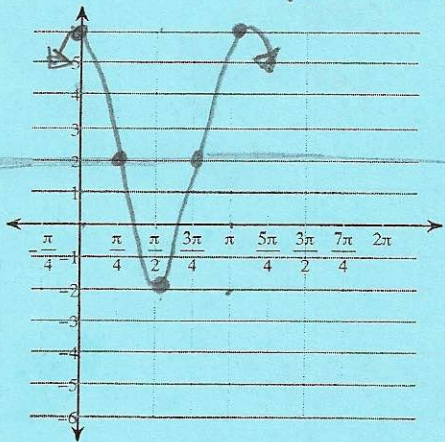
10) $y = -2 + \sin \theta$

amp = 1
 period = 2π
 VS = -2



11) $y = 4\cos 2\theta + 2$

amp = 4
 period $\frac{2\pi}{2} = \pi$
 VS = 2



12) $y = \frac{1}{2} \cdot \sin 4\theta - 2$

amp = $\frac{1}{2}$
 period = $\frac{2\pi}{4} = \frac{\pi}{2}$
 VS = -2

