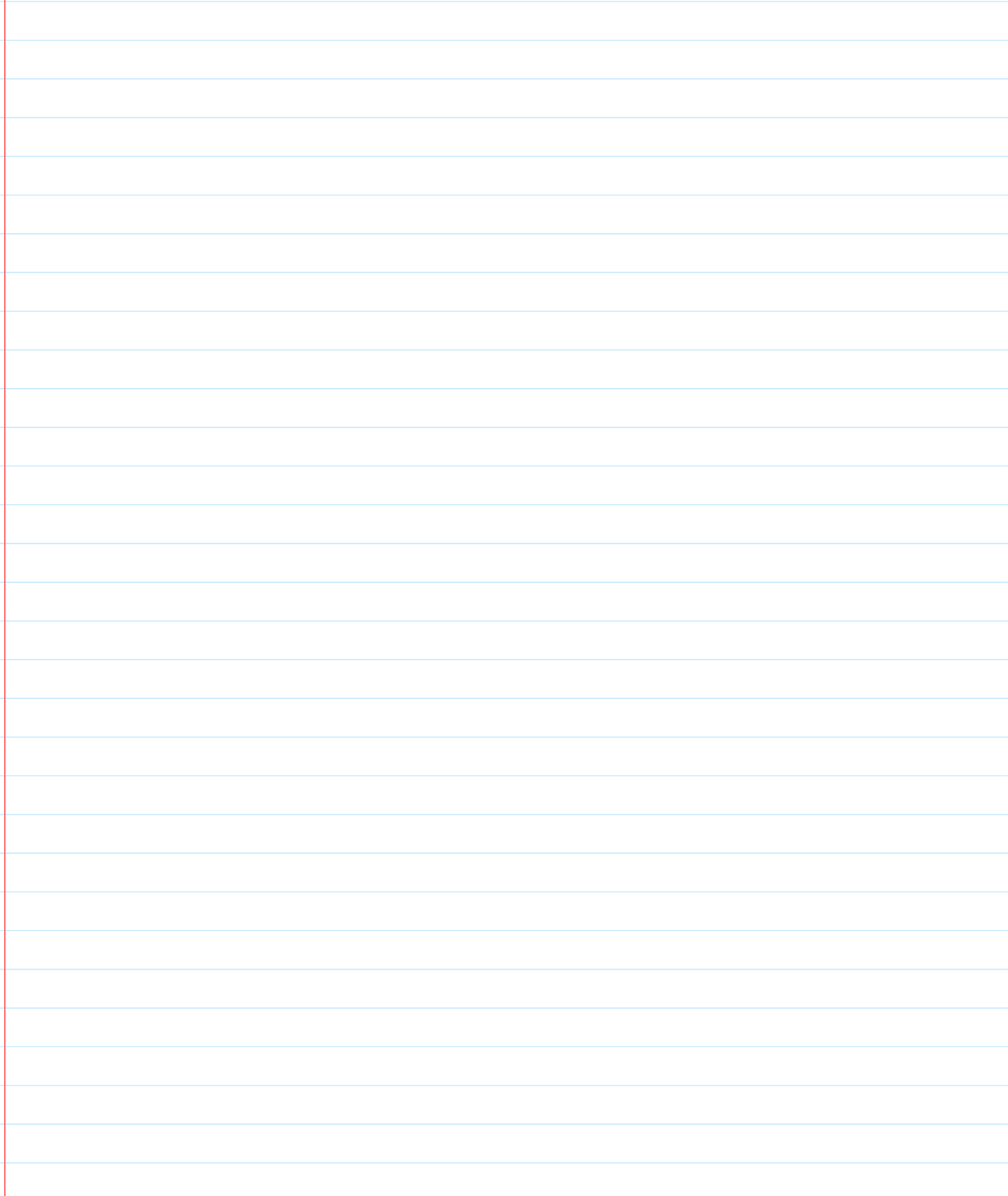


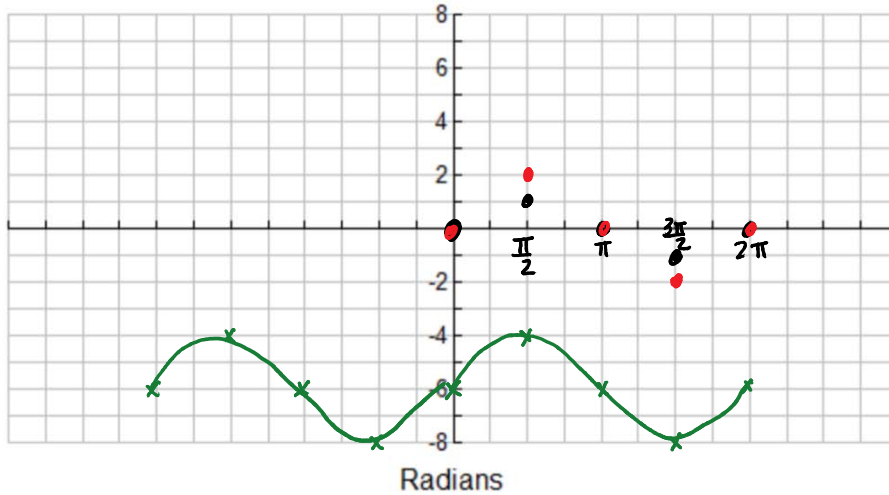
Graphing day 1

Friday, January 27, 2017 9:11 AM



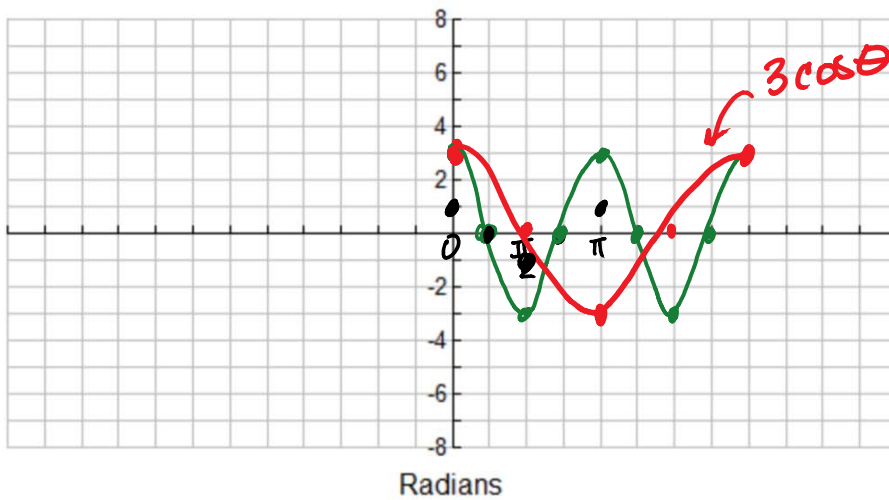
Graph transformations of sinusoids day 1

1. Graph two periods of $y = 2 \sin \theta - 6$



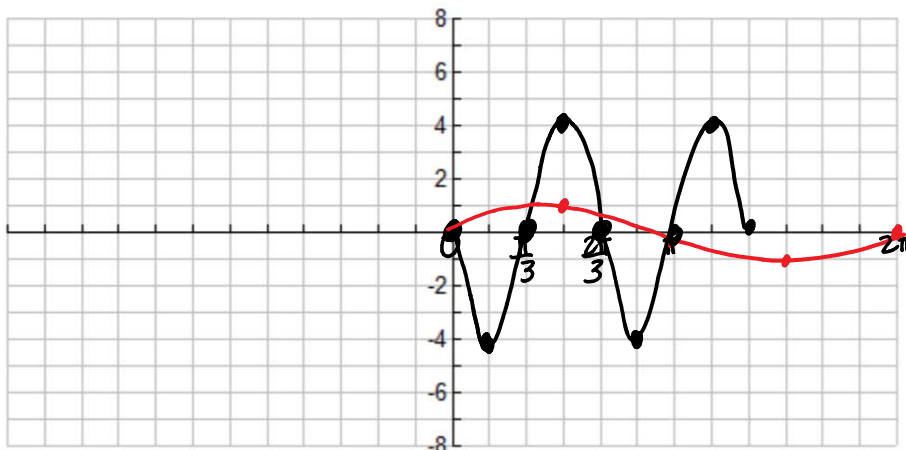
Amplitude: 2
 Sinusoidal axis: $y = -6$
 Period: 2π
 Phase shift: None
 End critical point: 2π

2. Graph two periods of $y = 3 \cos 2\theta$



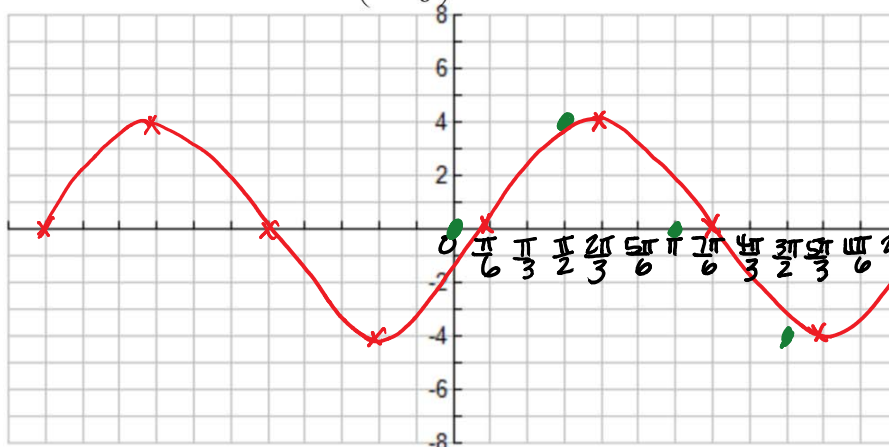
Amplitude: 3
 Sinusoidal axis: $y = 0$
 Period: $\frac{2\pi}{2} = \pi$
 Phase shift: None
 End critical point: π

3. Graph two periods of $y = -4 \sin 3\theta$



Amplitude: 4
 Sinusoidal axis: $y = 0$
 Period: $\frac{2\pi}{3}$
 Phase shift: None
 End critical point: $\frac{2\pi}{3}$

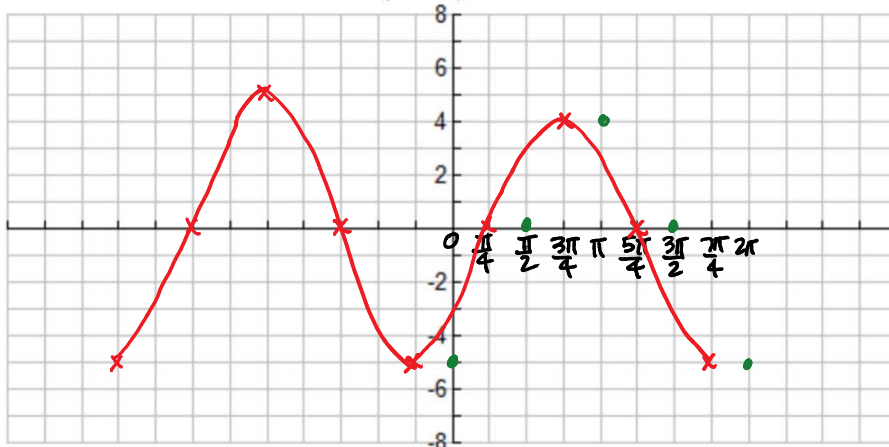
4. Graph two periods of $y = 4 \sin\left(\theta - \frac{\pi}{6}\right)$



Amplitude: 4
 Sinusoidal axis: $y = 0$
 Period: 2π
 Phase shift: Right $\frac{\pi}{6}$

End critical point:
 $\frac{\pi}{6} + 2\pi = \frac{13\pi}{6}$

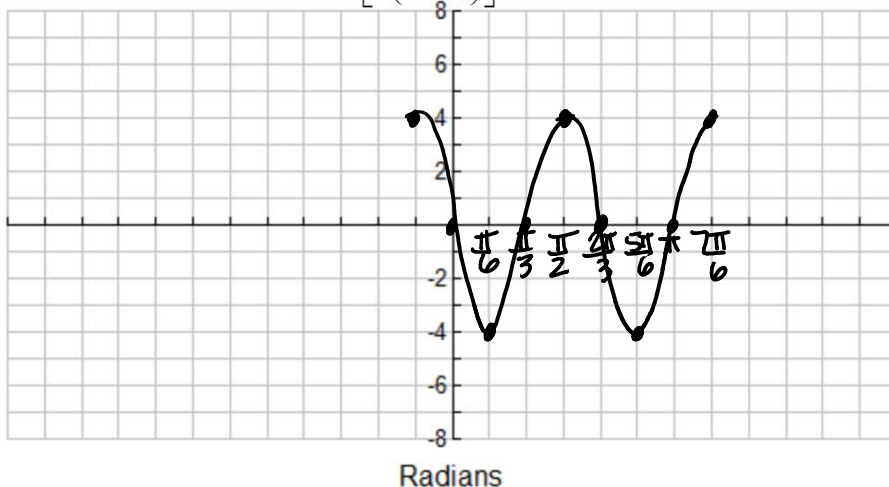
5. Graph two periods of $y = -5 \cos\left(\theta + \frac{\pi}{4}\right)$



Amplitude: 5
 Sinusoidal axis: $y = 0$
 Period: 2π
 Phase shift: Left $\frac{\pi}{4}$

End critical point:
 $-\frac{\pi}{4} + 2\pi = \frac{7\pi}{4}$

6. Graph two periods of $y = 4 \cos\left[3\left(\theta - \frac{\pi}{2}\right)\right]$



Amplitude: 4
 Sinusoidal axis: $y = 0$
 Period: $\frac{2\pi}{3}$
 Phase shift: Right $\frac{\pi}{2}$

End critical point:
 $\frac{\pi}{2} + \frac{2\pi}{3} = \frac{3\pi}{6} + \frac{4\pi}{6} = \frac{7\pi}{6}$