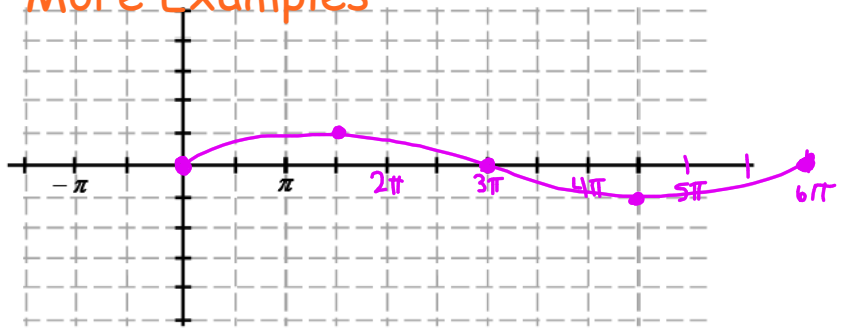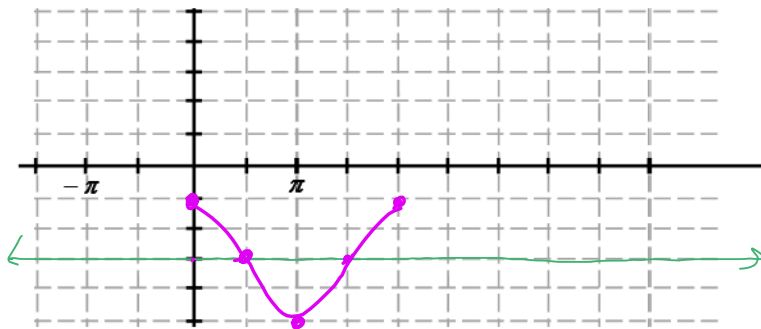**More Examples**
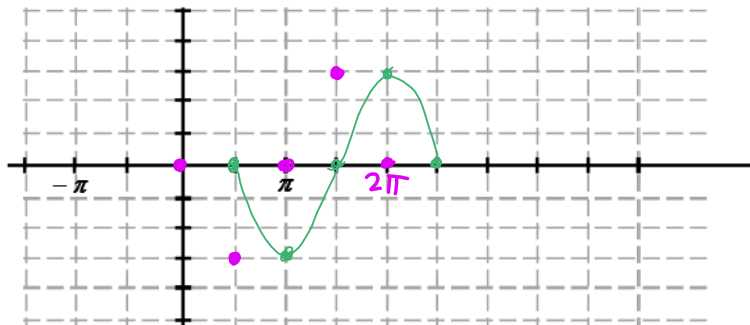
1. $y = \sin \dfrac{1}{3} x$

Vert. Shift: _____

Phase Shift: _____

Amplitude: 1

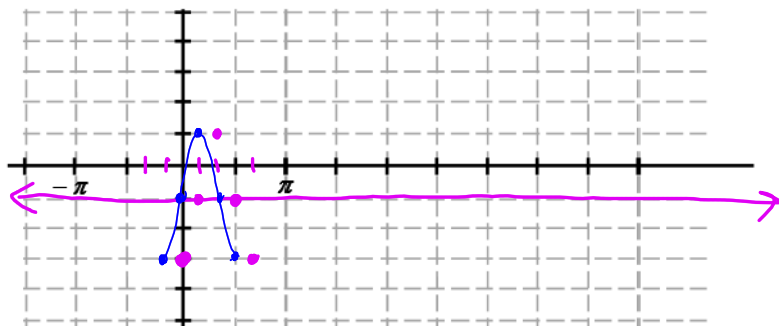Period: $\dfrac{2\pi}{1/3} = 6\pi$

Curve: $\sin$

2. $y = 2\cos x - 3$

Vert. Shift: down 3

Phase Shift: _____

Amplitude: 2

Period: 2π

Curve: $\cos$

3. $y = -3\sin\left(x - \dfrac{\pi}{2} \right)$

Vert. Shift: _____

Phase Shift: rt $\dfrac{\pi}{2}$ (90°)

Amplitude: 3

Period: 2π

Curve: $-\sin$

4. $y = -2\cos\left(3x + \dfrac{\pi}{2} \right) - 1$

Vert. Shift: down 1

Phase Shift: left 30°

Amplitude: 2

Period: $\dfrac{2\pi}{3}$ (120°)

Curve: $-\cos$

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