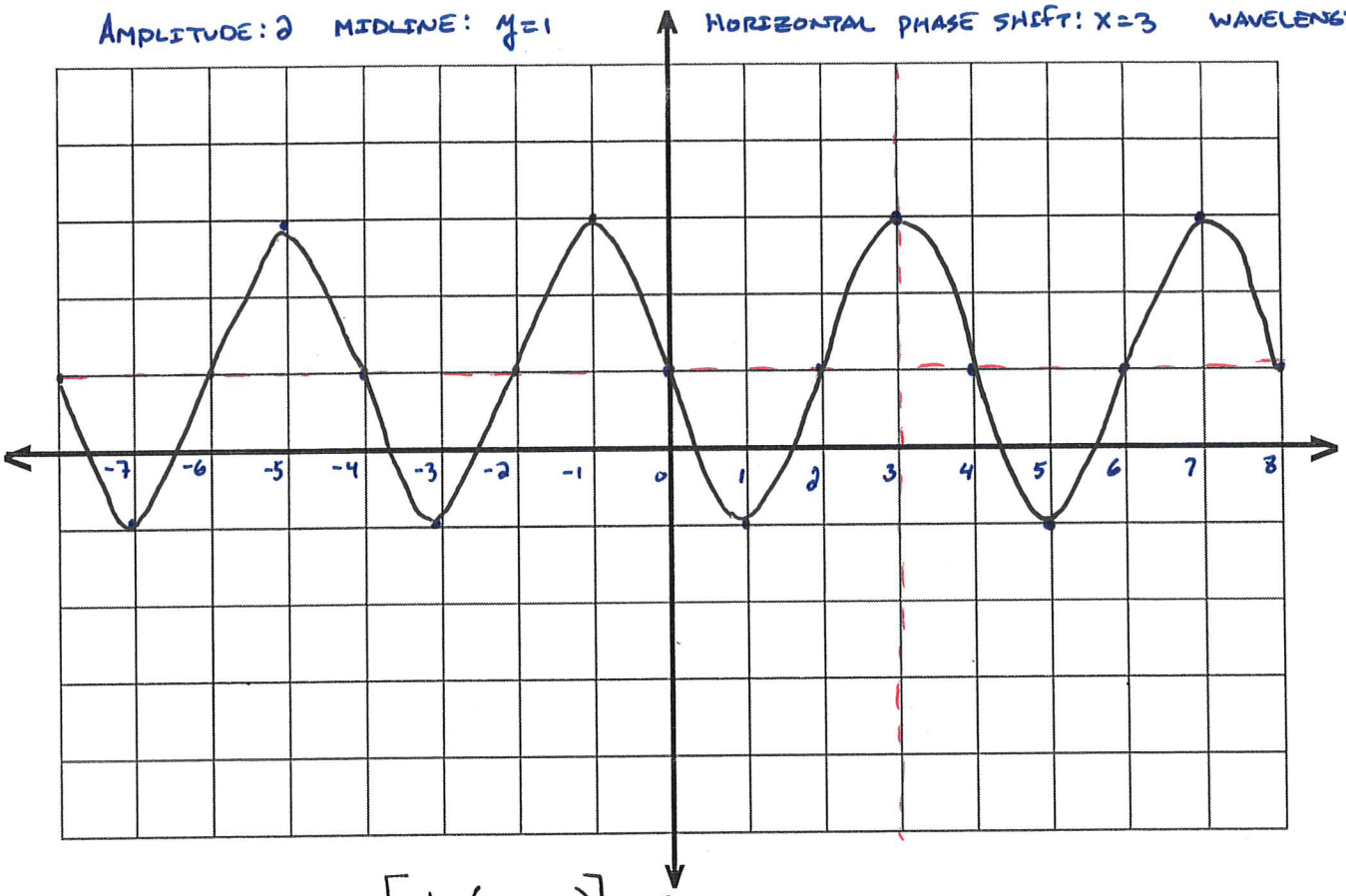
NAME _____

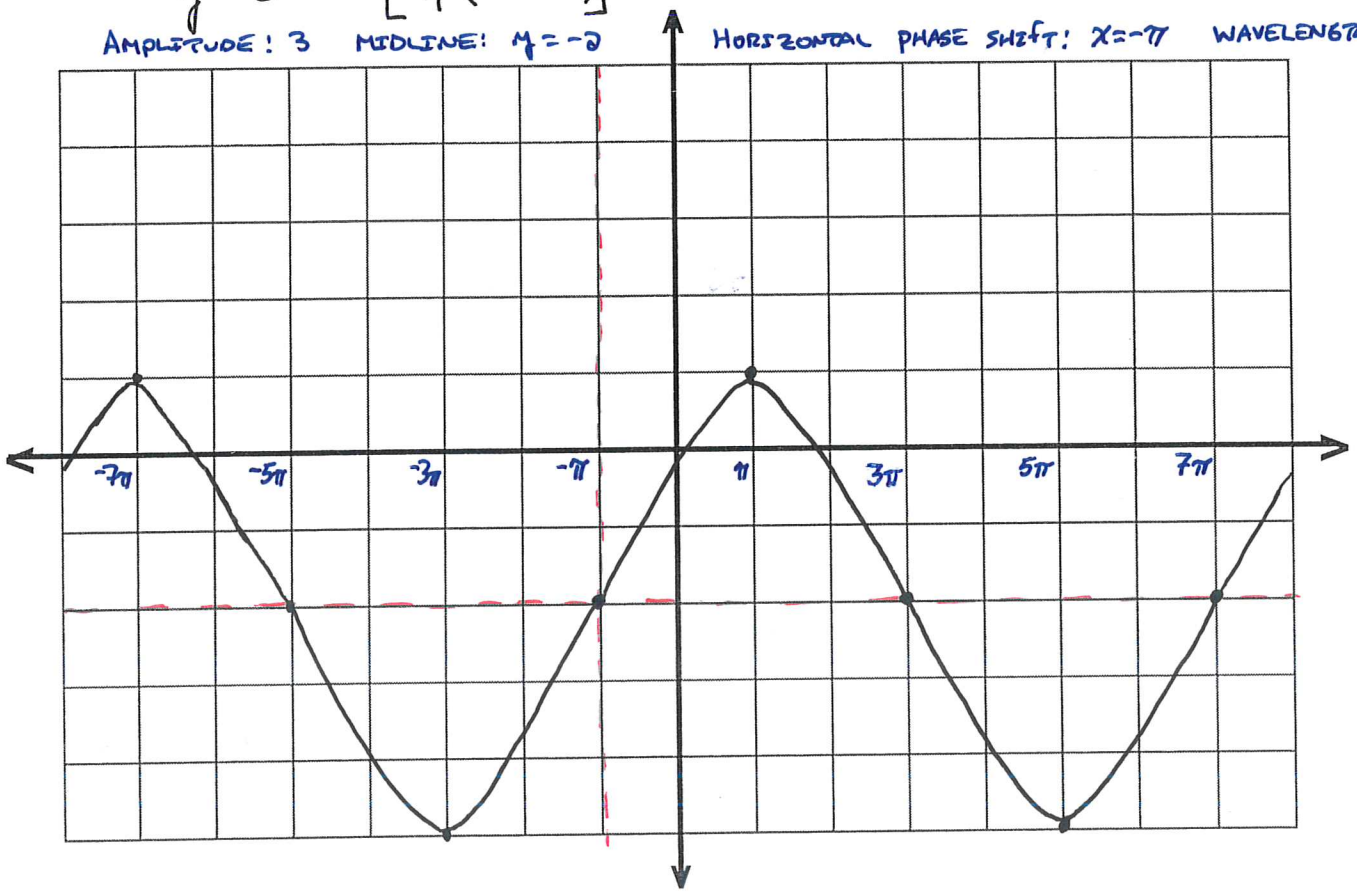
$y = 2\cos\left[\frac{1}{2}\pi(x-3)\right] + 1$

AMPLITUDE: 2 MIDLINE: $y=1$ HORIZONTAL PHASE SHIFT: $x=3$ WAVELENGTH: 4



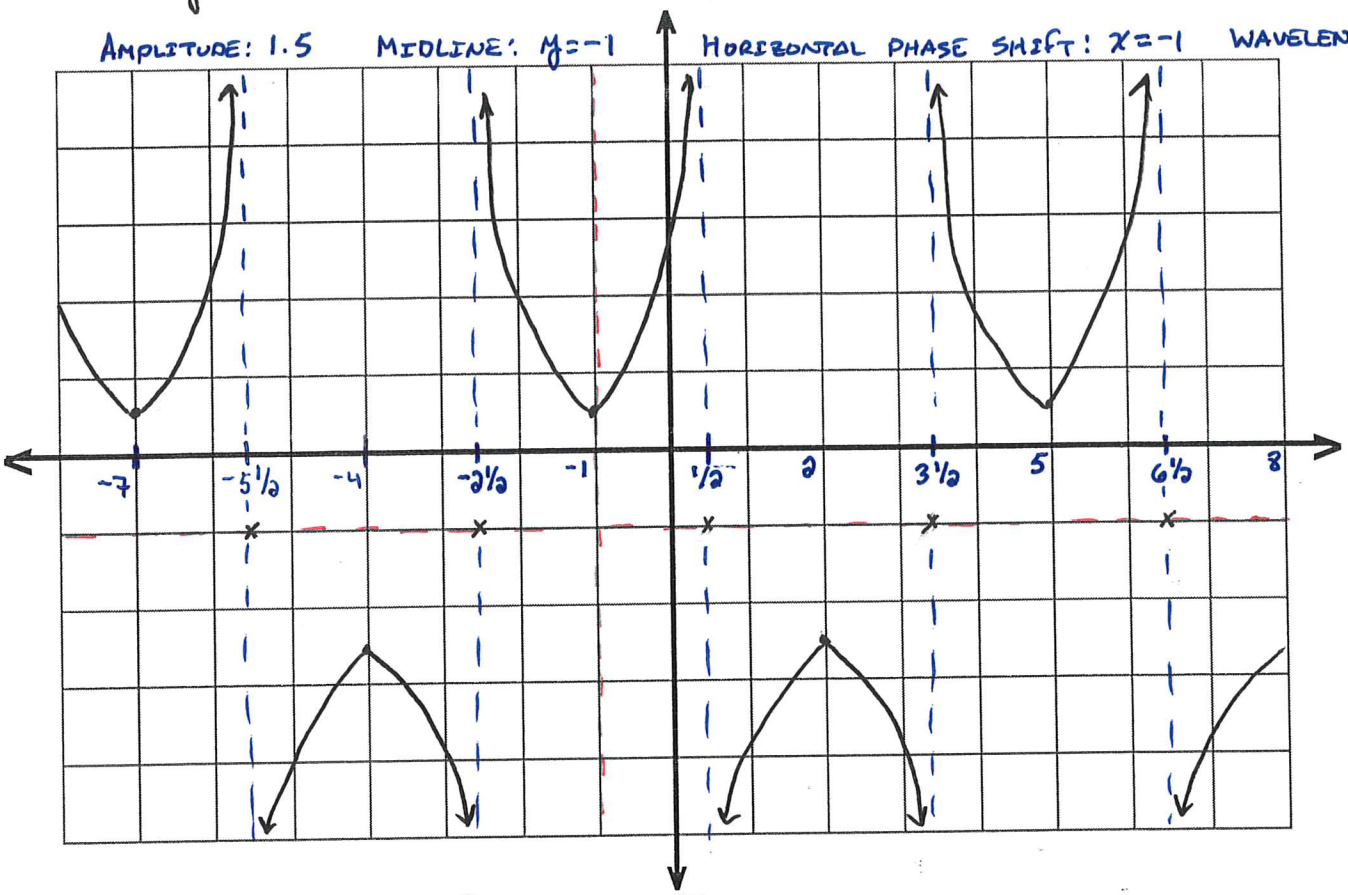
$y = 3\sin\left[\frac{1}{4}(x+\pi)\right] - 2$

AMPLITUDE: 3 MIDLINE: $y=-2$ HORIZONTAL PHASE SHIFT: $x=-\pi$ WAVELENGTH: 8π



$y = 1.5 \sec\left[\frac{1}{3}\pi(x+1)\right] - 1$

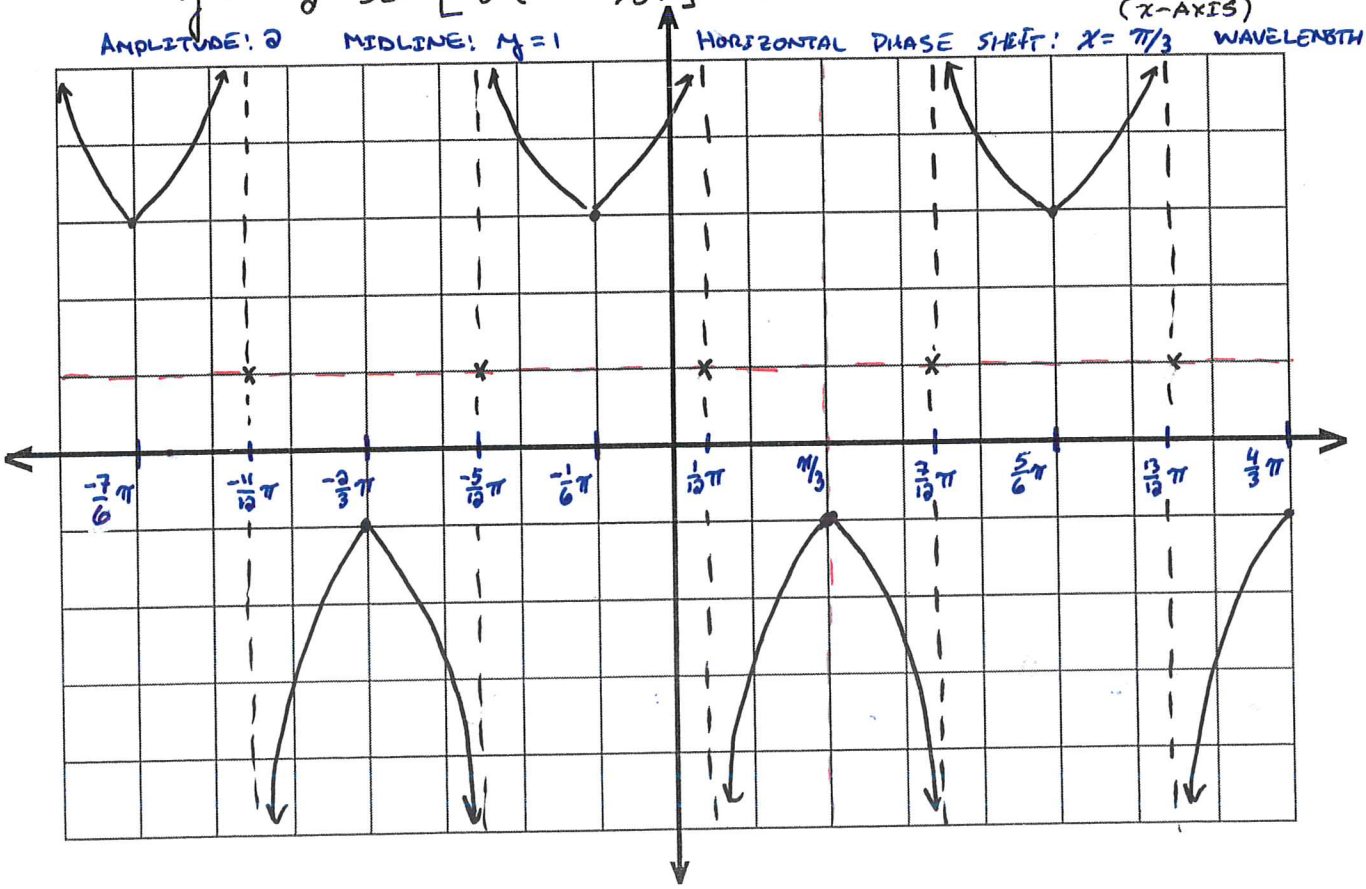
AMPLITUDE: 1.5 MIDLINE: $y=-1$ HORIZONTAL PHASE SHIFT: $x=-1$ WAVELENGTH: 6



$y = -2 \sec\left[2(x-\pi/3)\right] + 1$

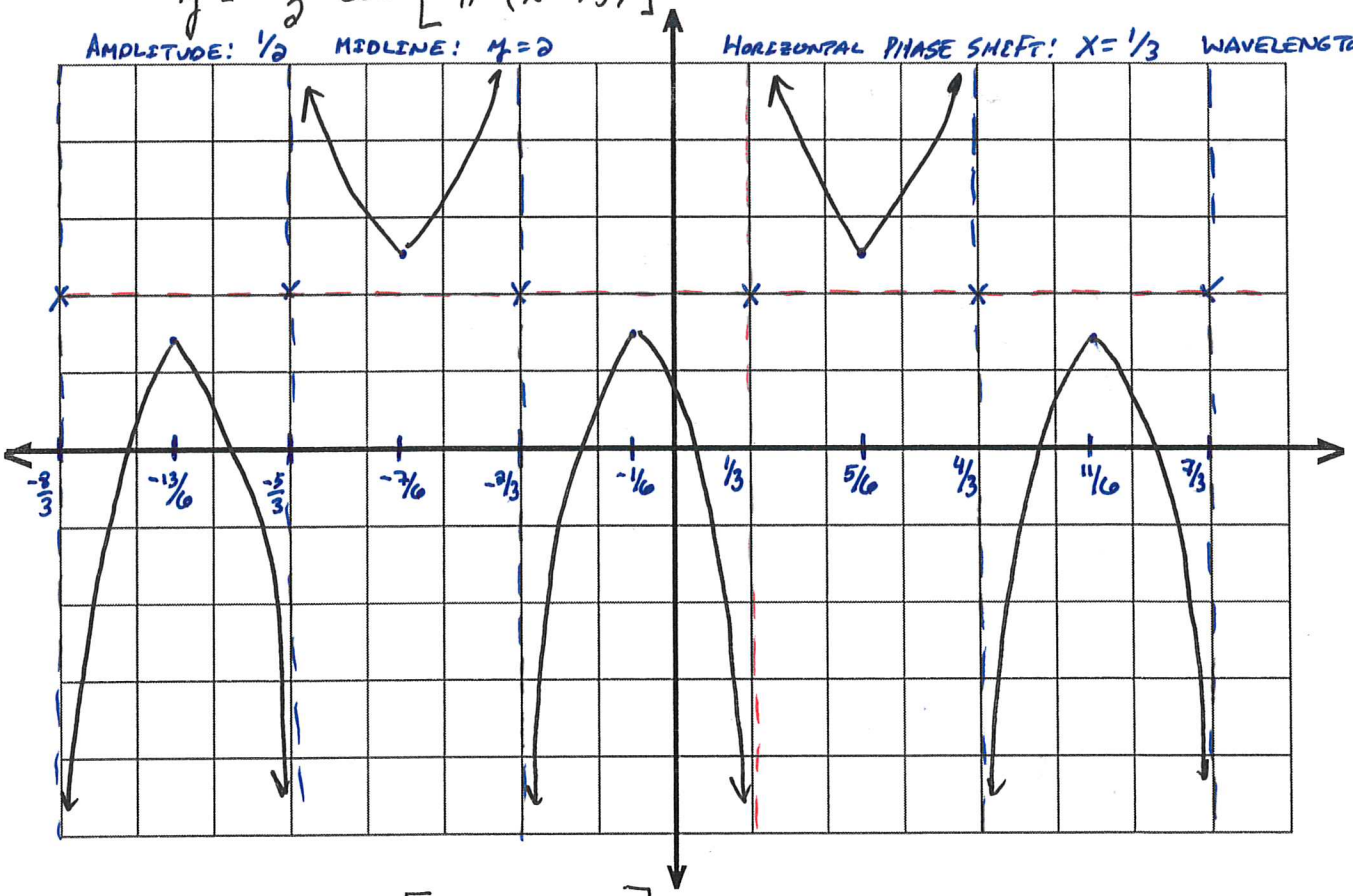
HINT: LET 2 BLOCKS = $\pi/3$ (x-AXIS)

AMPLITUDE: 2 MIDLINE: $y=1$ HORIZONTAL PHASE SHIFT: $x=\pi/3$ WAVELENGTH: π



$y = \frac{1}{2}\csc\left[\pi\left(x - \frac{1}{3}\right)\right] + 2$

AMPLITUDE: $\frac{1}{2}$ MIDLINE: $y = 2$ HORIZONTAL PHASE SHIFT: $x = \frac{1}{3}$ WAVELENGTH: 2



$y = -2\csc\left[\frac{1}{3}\left(x + \pi/2\right)\right] - 1$ WAVELENGTH = 6π

HINT: LET EACH BLOCK EQUAL π, GRAPH ON HALVES

AMPLITUDE: 2 MIDLINE: $y = -1$ HORIZONTAL PHASE SHIFT: $x = -\pi/2$