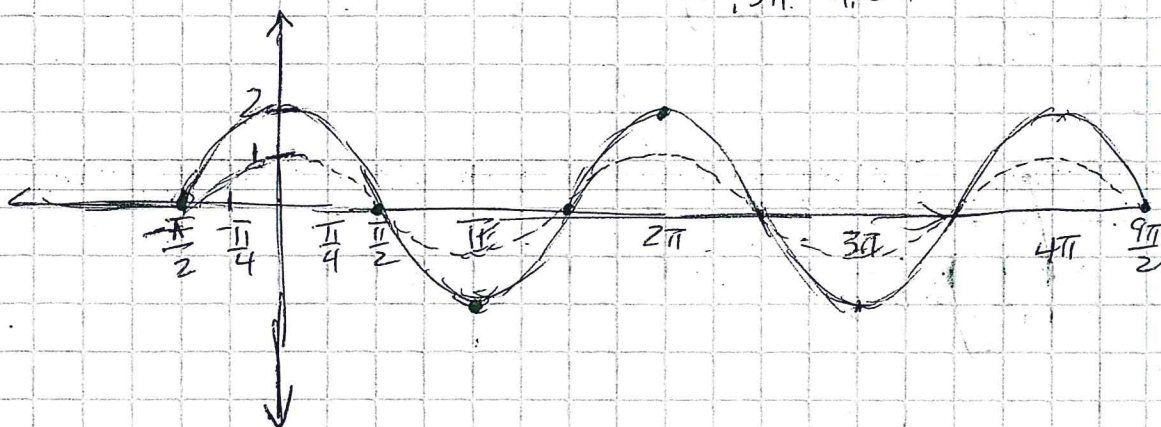
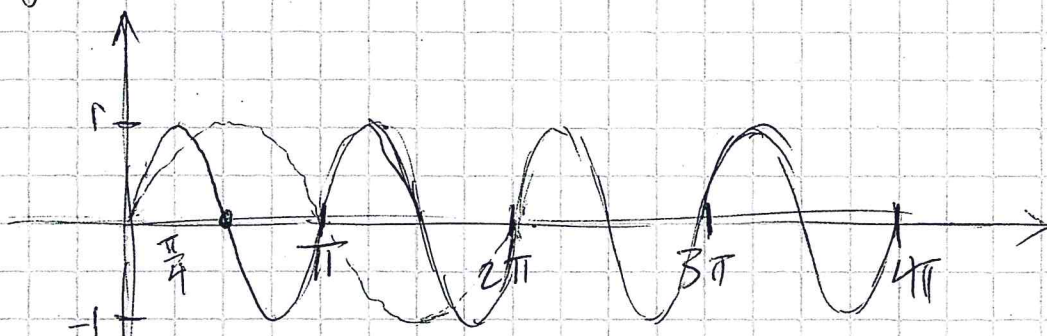


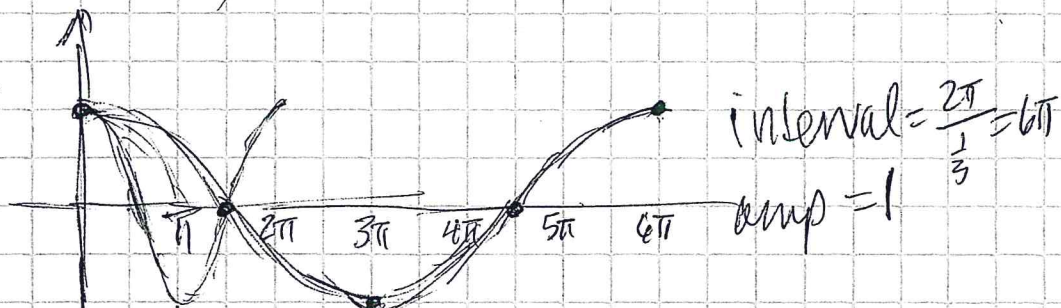
graph $y = 2 \cos x$ over $[-\frac{\pi}{2}, \frac{9\pi}{2}]$
 $-1.5\pi, 4.5\pi$



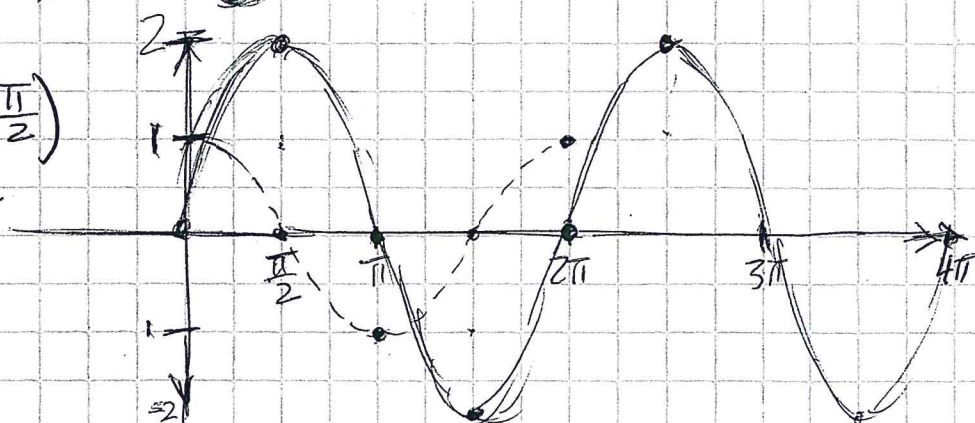
$y = \sin(2x)$ period $\frac{2\pi}{2} = \pi$



$y = \cos(\frac{x}{3}) = \cos(\frac{1}{3}x)$ $\frac{2\pi}{1/3} = 6\pi$



$y = 2 \cos(x - \frac{\pi}{2})$
 same
 $y = 2 \sin x$

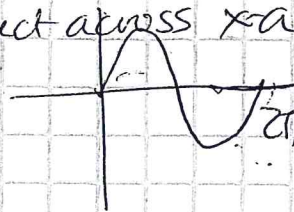


$$y = \frac{1}{2} \sin(\pi x + \pi)$$

reflect across x-axis

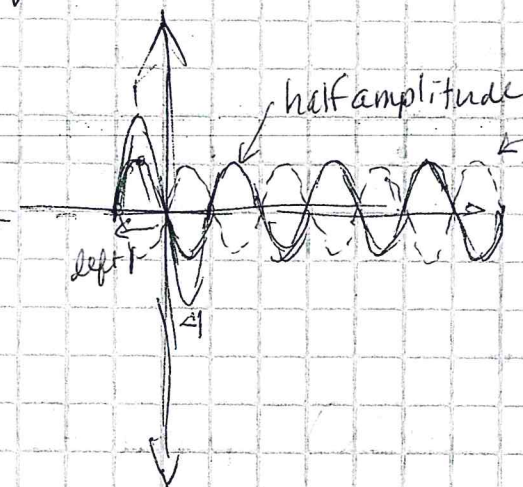
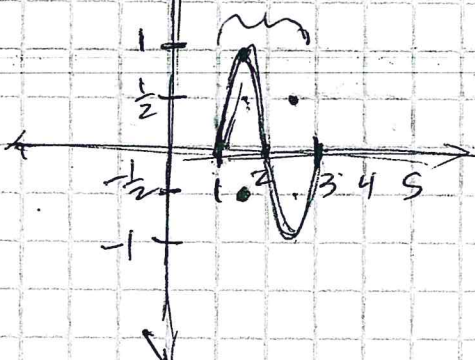
$$\frac{2\pi}{\pi} = 2 = \text{period}$$

$$-\frac{\pi}{\pi} = -1 \text{ left } 1$$



amp = $\frac{1}{2}$
half-height

period 2



reflect
now flip
across x-axis