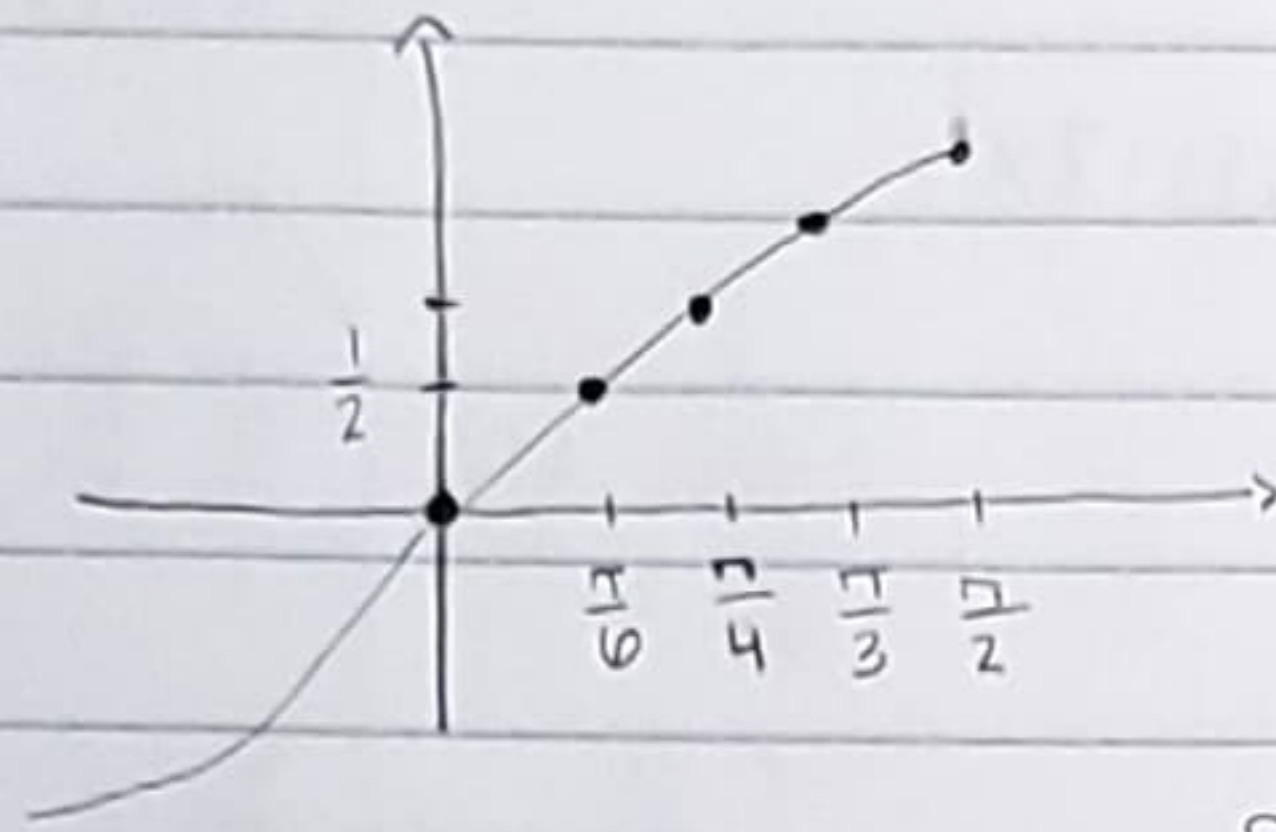


Graph of trigometric func

11 may 2023

odd func

$\sin(x) =$

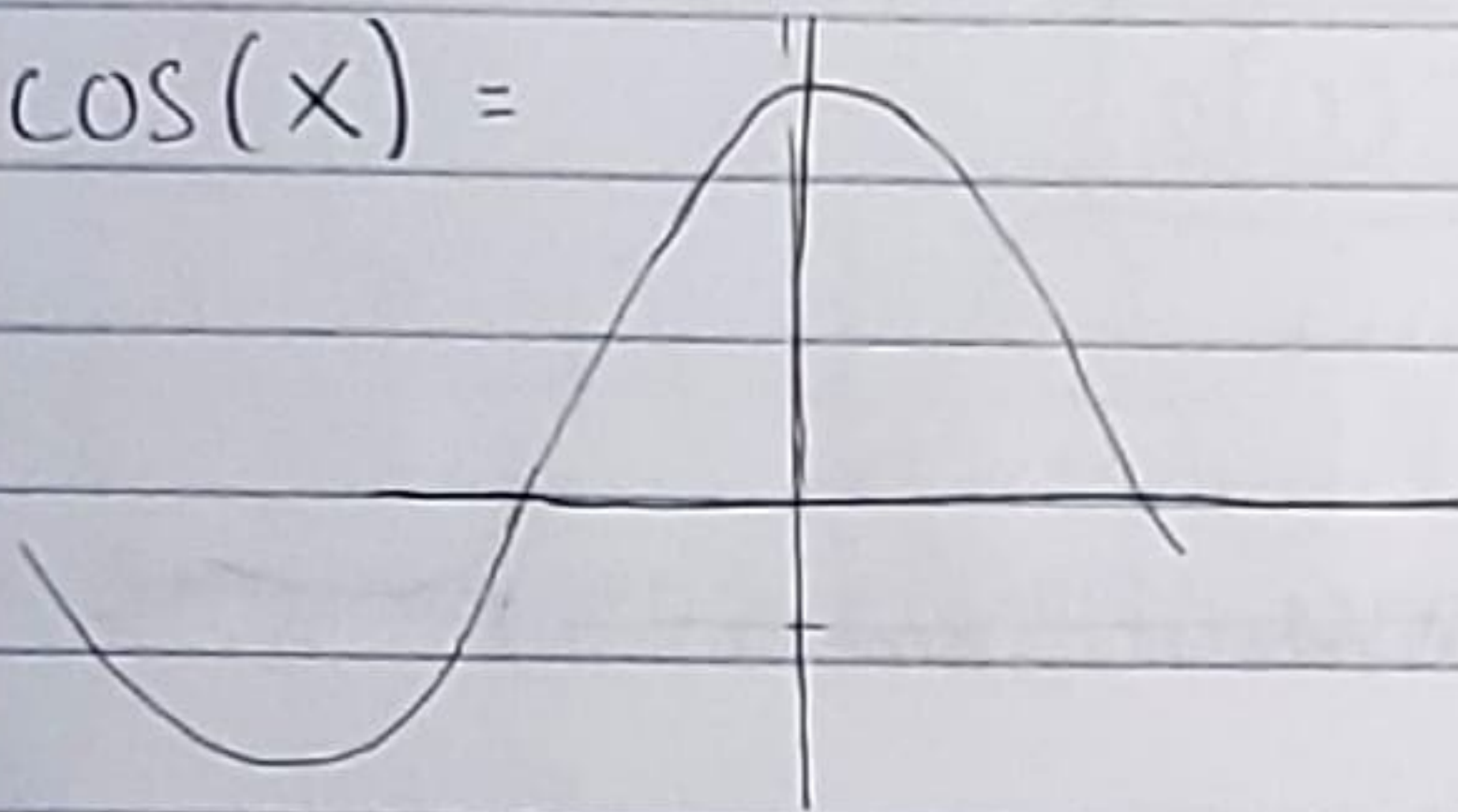


$\sin x = \sin(x + 2\pi)$

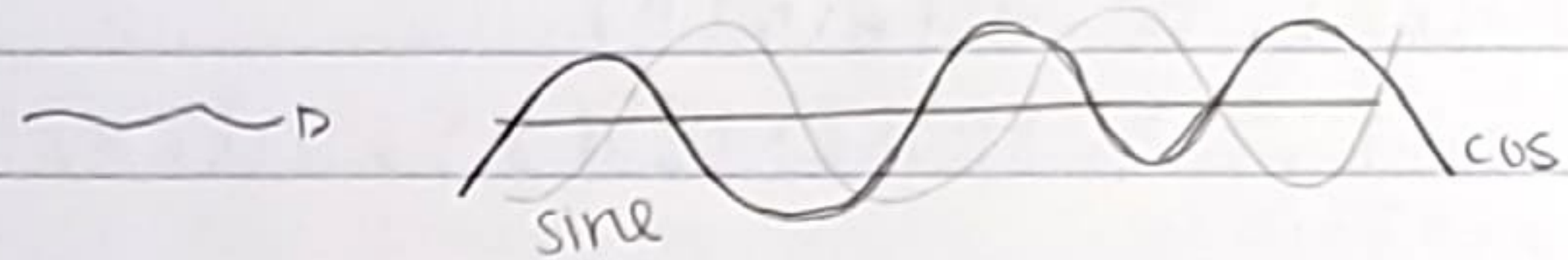
$\sin x$ is a periodic func w/ period = 2π

even func

$\cos(x) =$



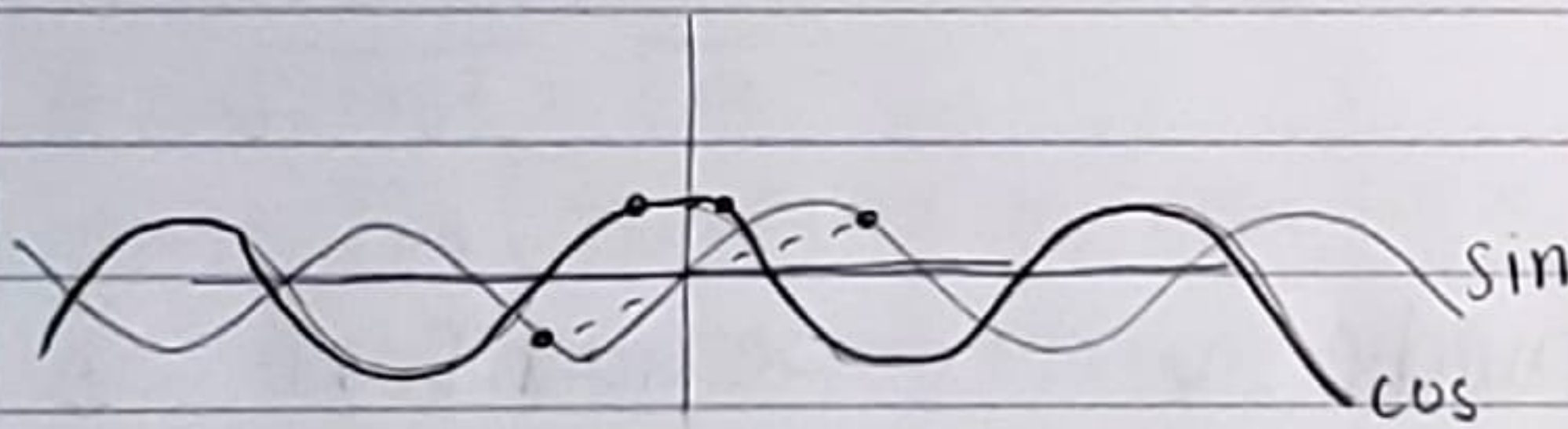
Shift the peak from \sin by $\pi/2$



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

$\cos x$ is periodic w/ period = 2π

- Odd and even on graph:



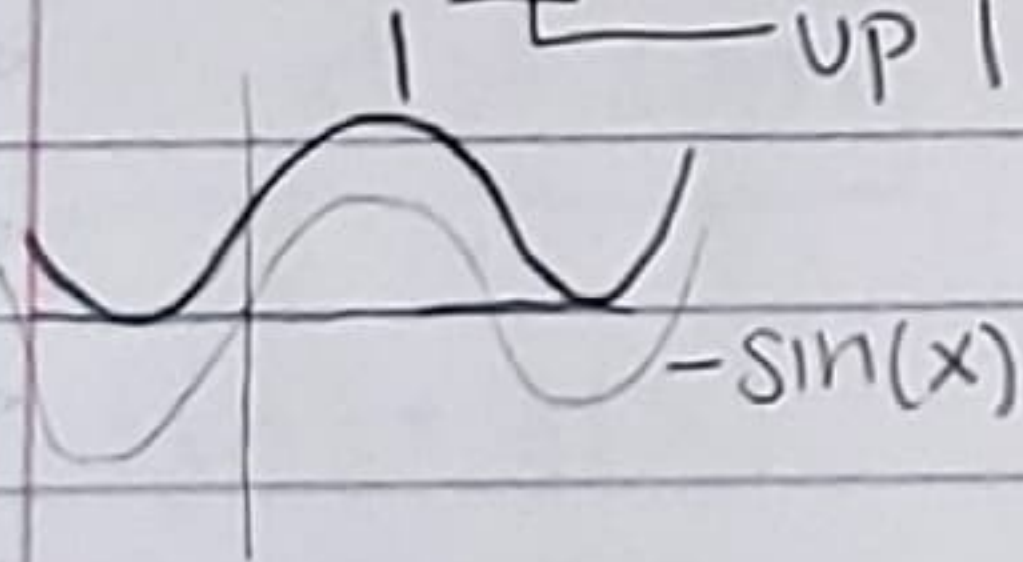
\sin = odd bc symmetric at origin
 \cos = even bc symmetric at y-axis

Graph manipulation

12 may 2023

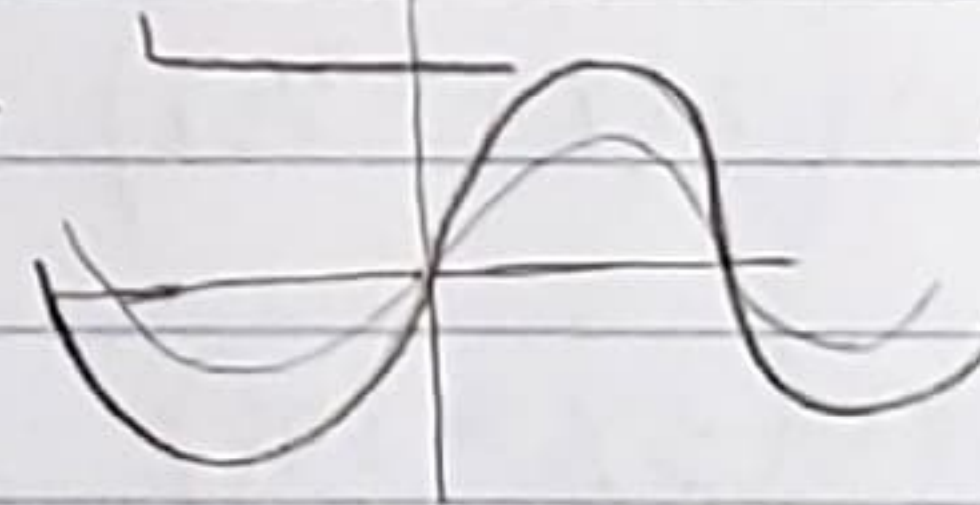
$y = \sin(x) + 1$

up 1 unit



$y = 2\sin(x)$

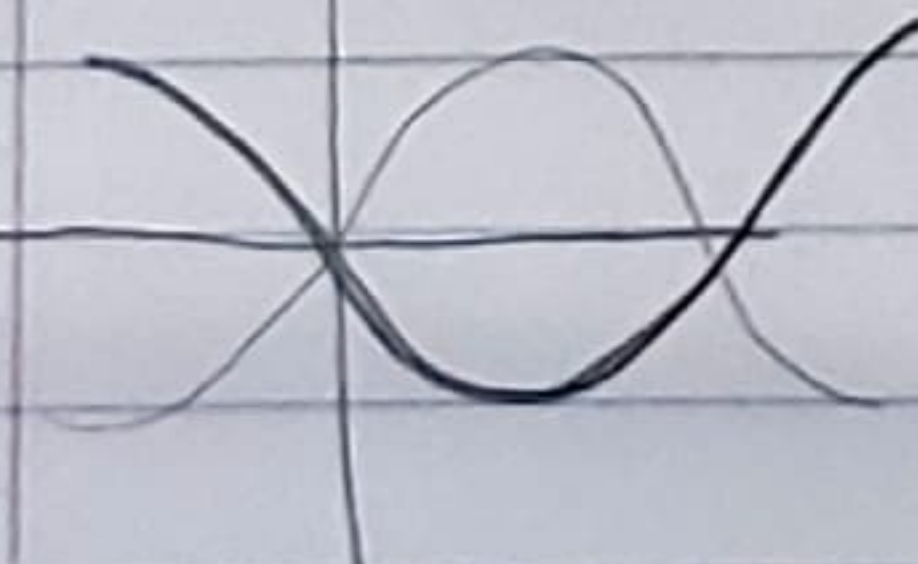
scale vert by 2



double height of curves

$y = -2\sin(x)$

scale vert op. way



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

shrink by 1/2

