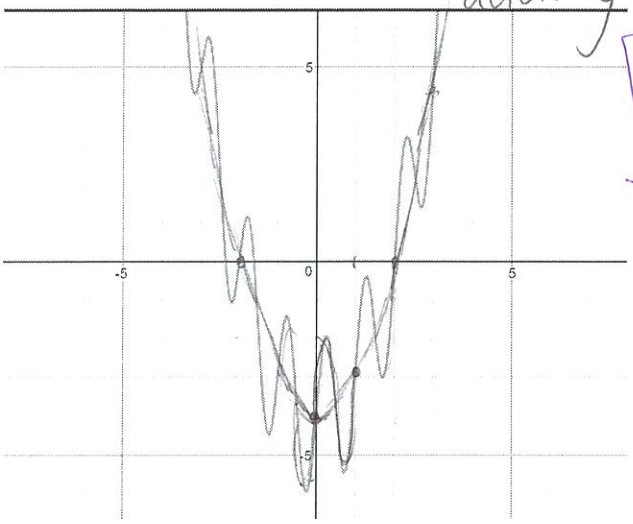
STEPS:

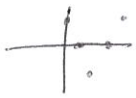
$\frac{2\pi}{x} = 1$

$A = 2$

adding → quadratic → sin → pos. → period, amp

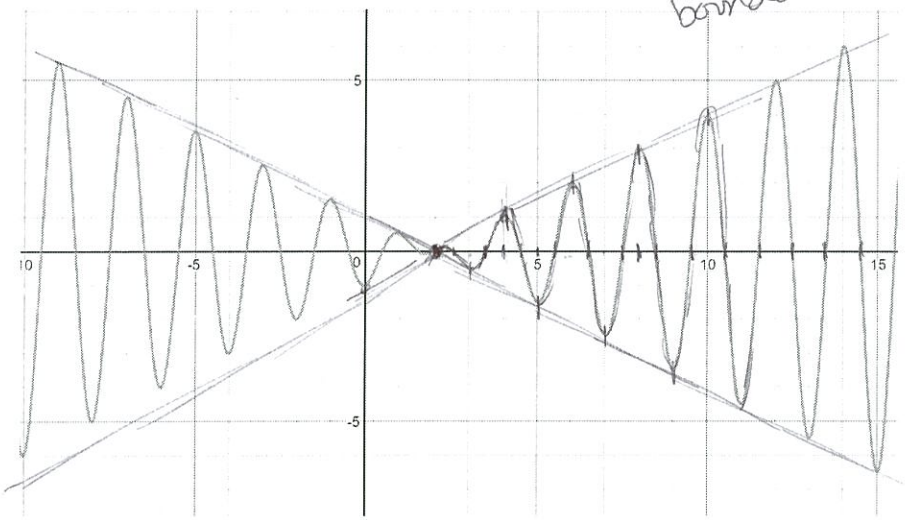


$(x^2 - 4) + 2\sin(2\pi x)$

$\frac{2\pi}{\pi} = 2$   $\frac{\pi}{2}, \frac{3\pi}{2}$

1.6 4.7

mult. → linear boundaries → odd so cos → important points happening every $\frac{1}{2}$ so $\frac{1}{2} \cdot 4 =$ 2



$b = 3$

3 1

$\frac{2\pi}{x} = 2$

$x = \pi$

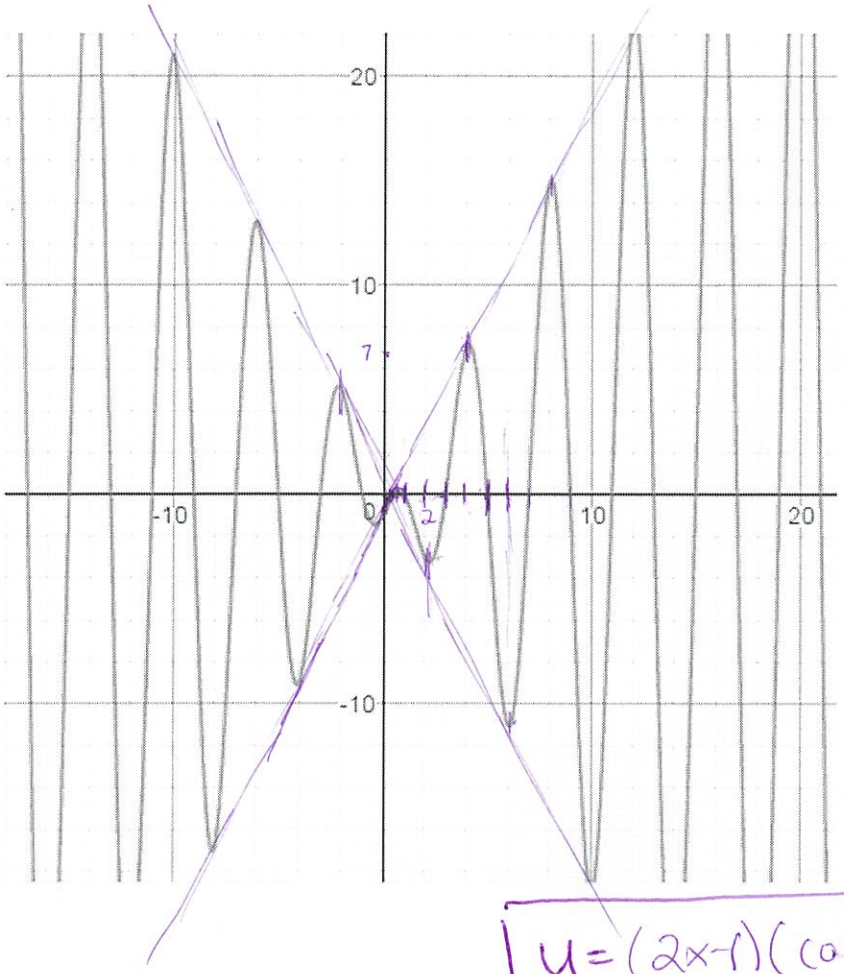
$\frac{1}{2} \cdot 4 = 2$

$y = (\frac{1}{2}x - 1)(\cos \pi x)$

$y = \frac{1}{2}x - 1$

$y = \cos(\pi x)$

$2\pi \cdot \frac{2}{\pi} = 4$



$\frac{8v}{4} = 2$

$y = 2x - 1$

$\cos(x)$

$\frac{2\pi}{x} = 4$

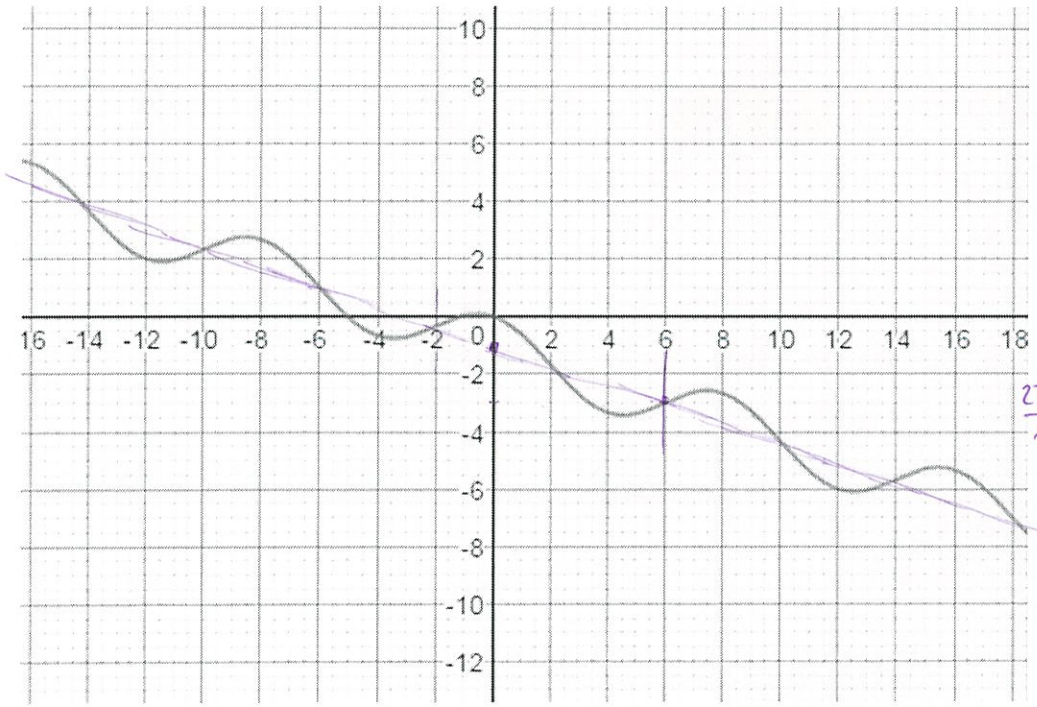
$\frac{1}{4} \cdot 4 = 1$

$1 \cdot 4 = 4$

$2\pi = 4x$

$\frac{\pi}{2}$

$y = (2x-1)(\cos \frac{\pi}{2} x)$



$y = -\frac{1}{3}x - 1$

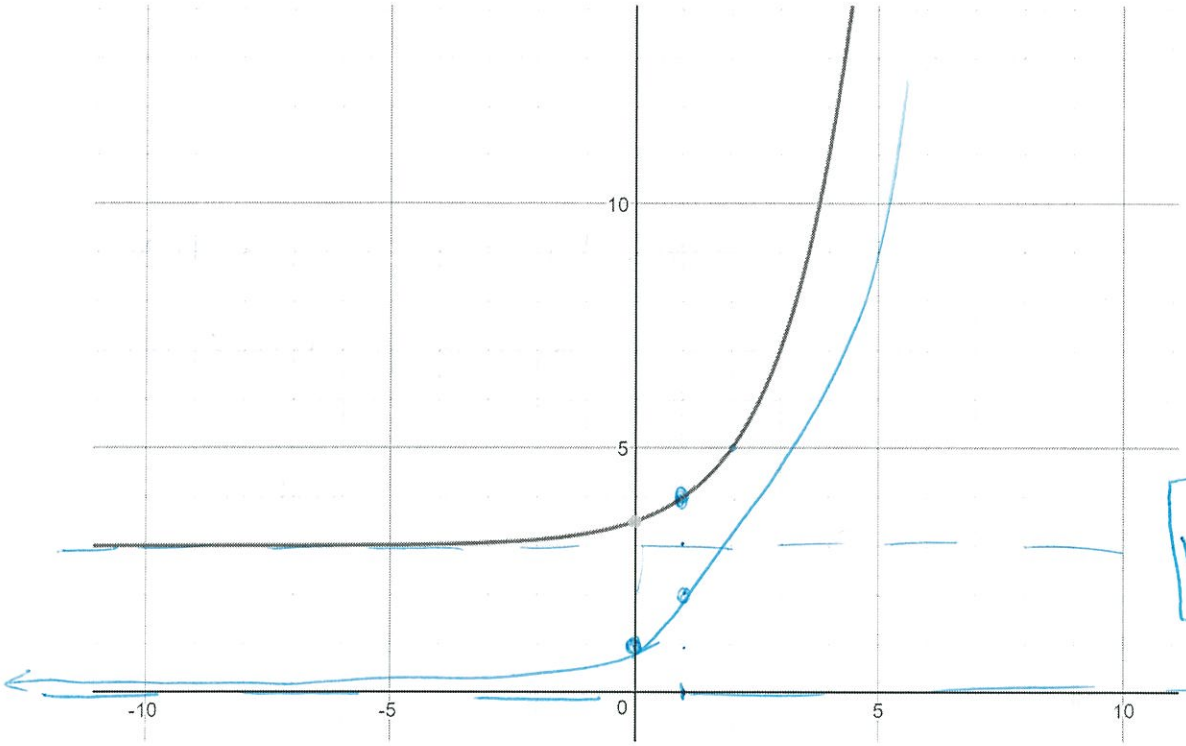
$\cos(\frac{\pi}{4}x)$

$\frac{2\pi}{x} = 8$

$2\pi = 8x$

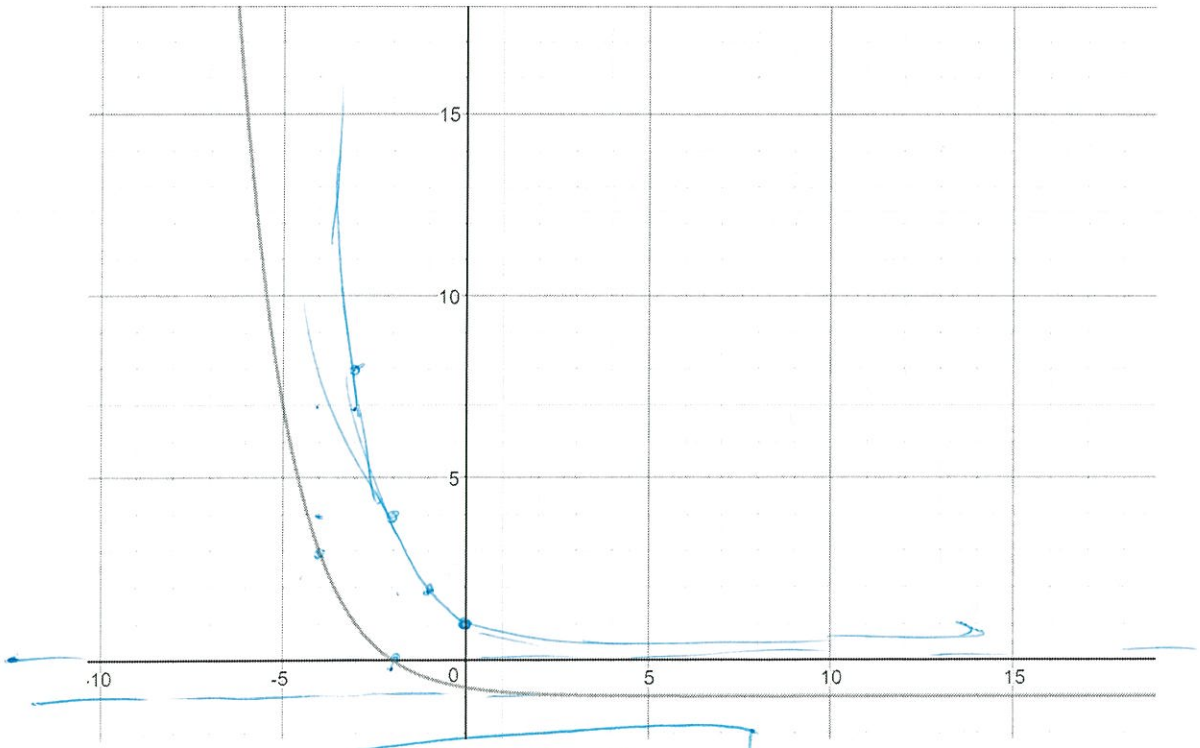
$\frac{\pi}{4}x$

$y = -\frac{1}{3}x - 1 + \cos(\frac{\pi}{4}x)$



up 3
right 1

$y = 2^{x-1} + 3$



down 1
~~up~~
~~over~~
left 2

x	y
0	1
-2	4
-1	2

$y = \frac{1}{2}^{x+2} - 1$