

Fill in the information and graph 2 complete cycles of each function below.

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

Amp: 2

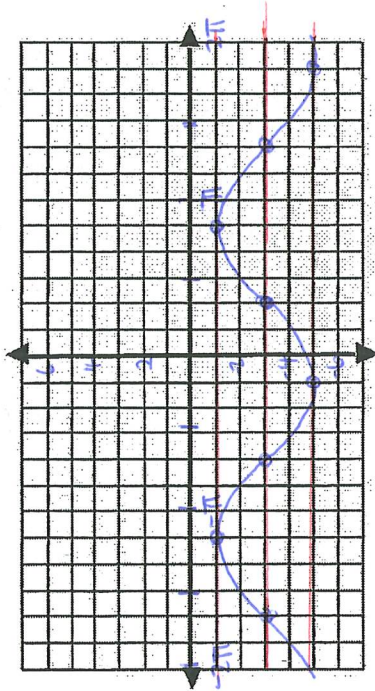
Centre: -3

Max: -1

Mini: -5

Period: 2π

P.S.: $\frac{\pi}{3} = \frac{2\pi}{6}$
(right)



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

Amp: 2

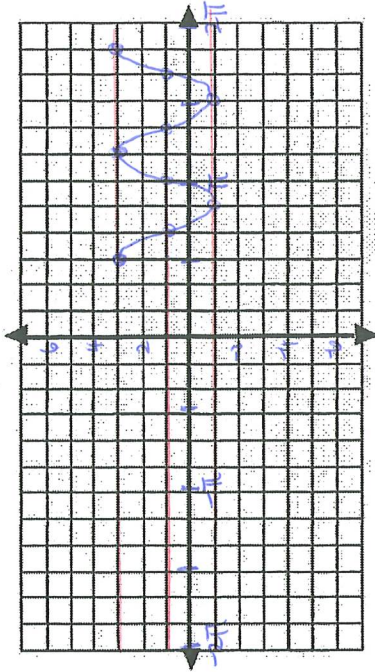
Centre: 1

Max: 3

Mini: -1

Period: $\frac{2\pi}{3} = \frac{4\pi}{6}$

P.S.: $\frac{\pi}{2} = \frac{3\pi}{6}$
(right)



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

Amp: 3

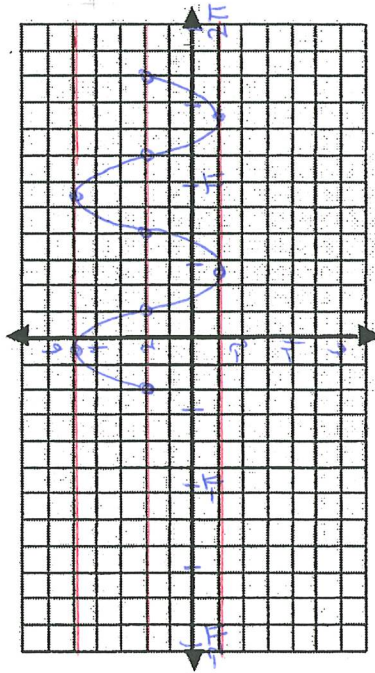
Centre: 2

Max: 5

Mini: -1

Period: $\pi = \frac{6\pi}{6}$

P.S.: $-\frac{\pi}{3} = \frac{-2\pi}{6}$
(left)



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

Amp: 4

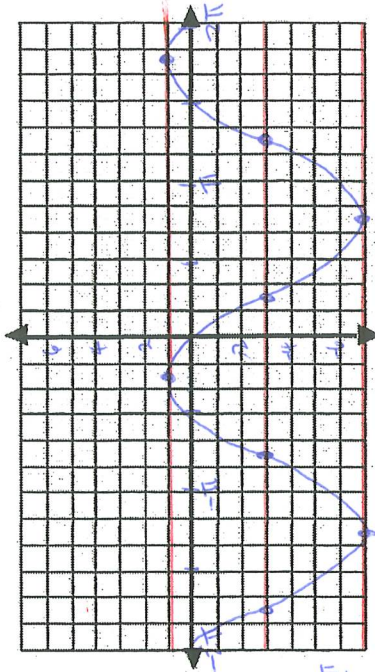
Centre: -3

Max: 1

Mini: -7

Period: $2\pi = \frac{12\pi}{6}$

P.S.: $-\frac{\pi}{4} = \frac{-1.5\pi}{6}$
(left)



5. $y = 5\cos\left(x - \frac{5\pi}{6}\right) + 1$

Amp: 5

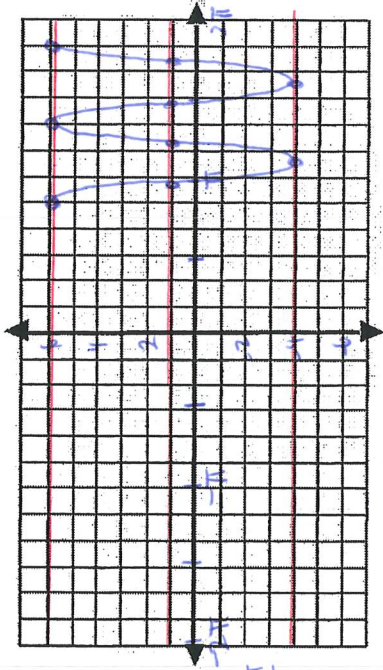
Centre: 1

Max: 6

Mini: -4

Period: $\frac{2\pi}{4} = \frac{\pi}{2} = \frac{3\pi}{6}$

P.S.: $\frac{5\pi}{6}$ (right)



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

Amp: 1

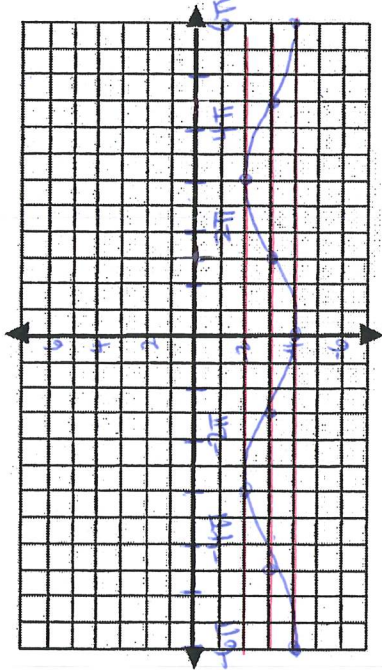
Centre: -3

Max: -2

Mini: -4

Period: 6π

P.S.: $\frac{3\pi}{2}$ (right)



* each space = $\frac{\pi}{2}$

6. $y = -2\sin\left(\frac{1}{2}x + \frac{\pi}{4}\right) - 2$

Amp: 2

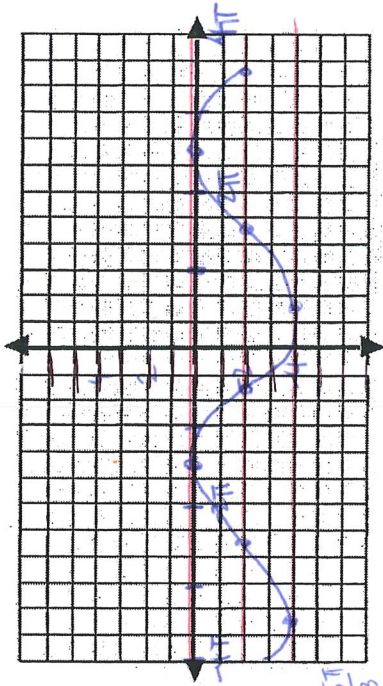
Centre: -2

Max: 0

Mini: -4

Period: 4π

P.S.: $-\frac{\pi}{2}$ $-\frac{15\pi}{3}$



* each space = $\frac{\pi}{3}$

8. $y = -2\cos\left(x + \frac{5\pi}{3}\right) + 1$

Amp: 2

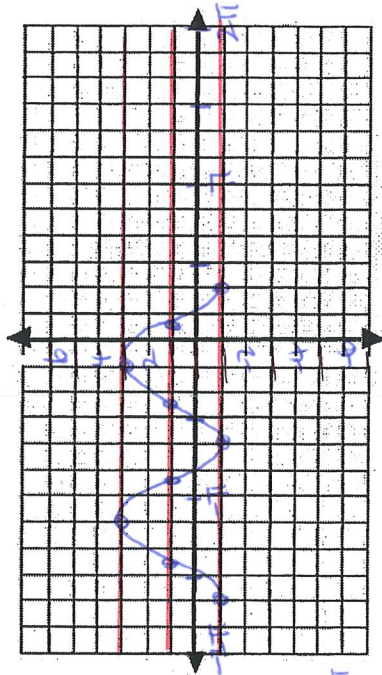
Centre: 1

Max: 3

Mini: -1

Period: $\frac{\pi}{6}$

P.S.: $-\frac{5\pi}{3}$ $-\frac{10\pi}{6}$



* upside down!