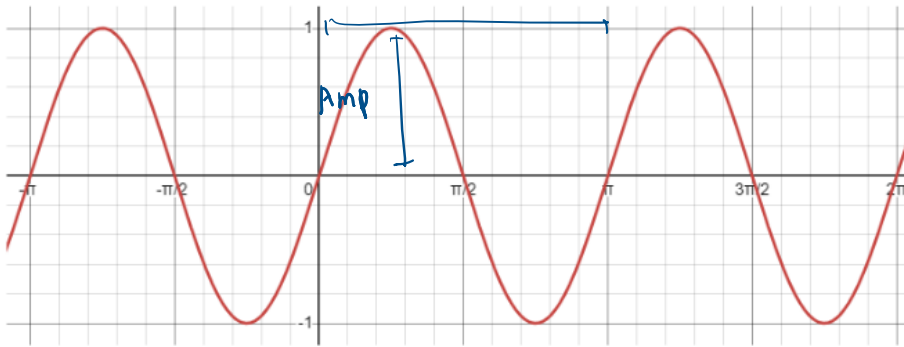
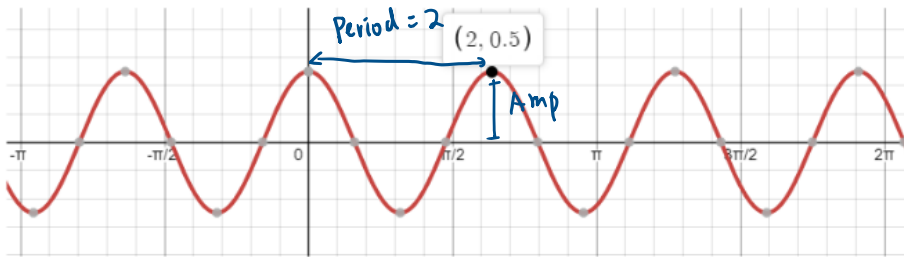


Graph

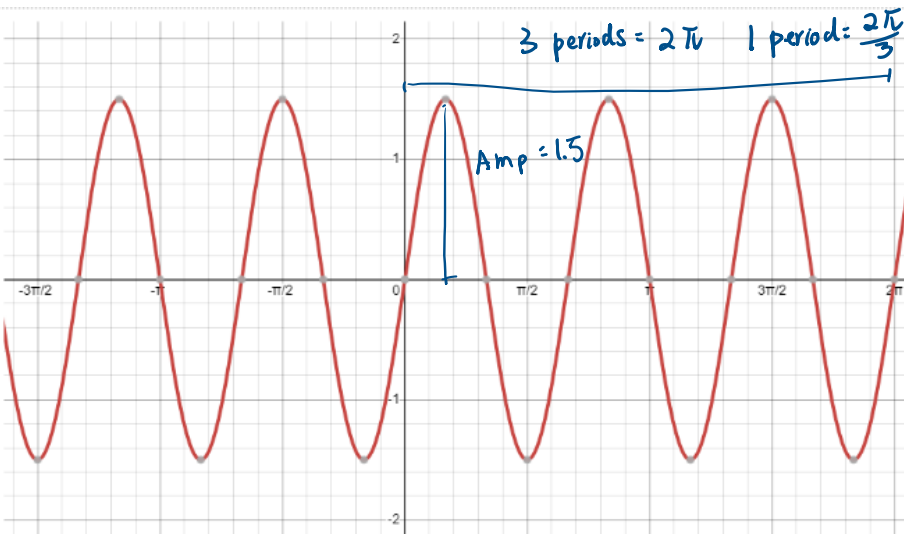


Equation of the graph

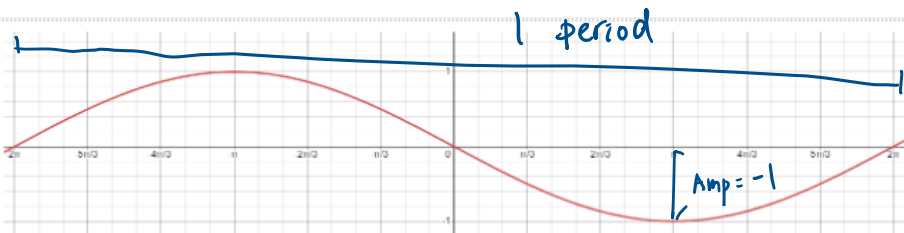
$$\begin{aligned} \text{Amp} &= 1 \\ \text{Period} &= \frac{2\pi}{n} = \pi \\ n &= 2 \\ y &= \sin(2x) \end{aligned}$$



$$\begin{aligned} \text{Amp} &= \frac{1}{2} \\ \text{Period} &= \frac{2\pi}{n} = 2 \\ n &= \pi \\ y &= \frac{1}{2} \cos(\pi x) \end{aligned}$$



$$\begin{aligned} \text{Amp} &= \frac{3}{2} \\ \text{Period} &= \frac{2\pi}{n} = \frac{2\pi}{3} \\ n &= 3 \\ y &= \frac{3}{2} \sin(3x) \end{aligned}$$

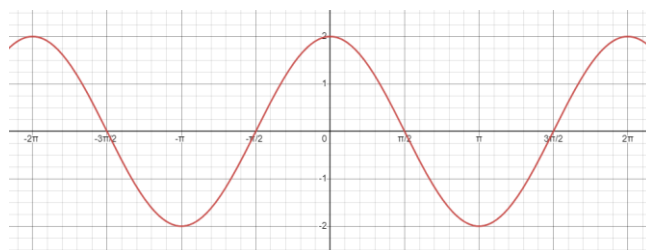
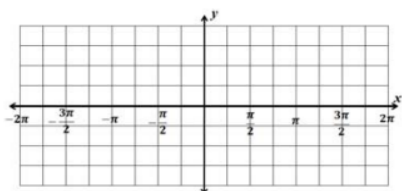


$$\begin{aligned} \text{Amp} &= 1 \\ \text{Period} &= \frac{2\pi}{n} = 4\pi \\ n &= \frac{1}{2} \\ y &= -\sin(\frac{1}{2}x) \end{aligned}$$

Part B: Graph the following trigonometric functions on your grid paper.

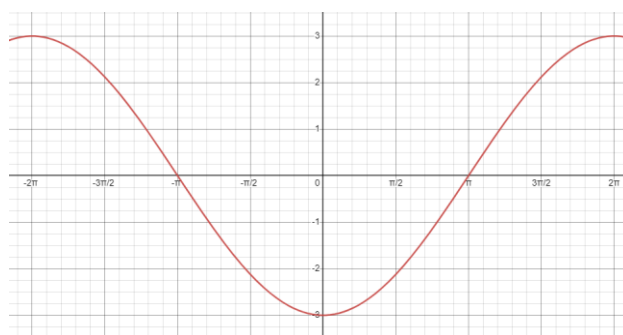
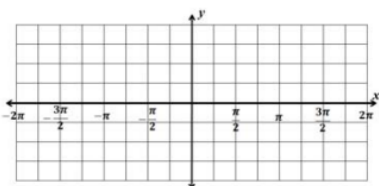
7. $y = 2 \cos x$

Amp: **2** Period: **2π** Freq: **$\frac{1}{2\pi}$**



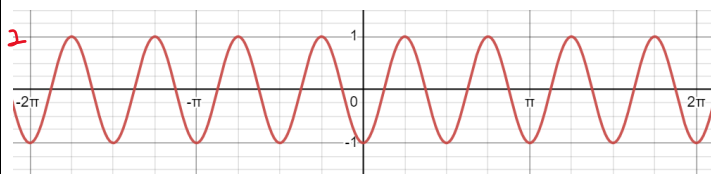
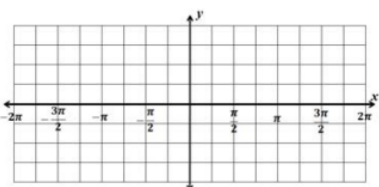
8. $f(\theta) = -3 \cos \frac{1}{2} \theta$

Amp: **3** Period: **4π** Freq: **$\frac{1}{4\pi}$**



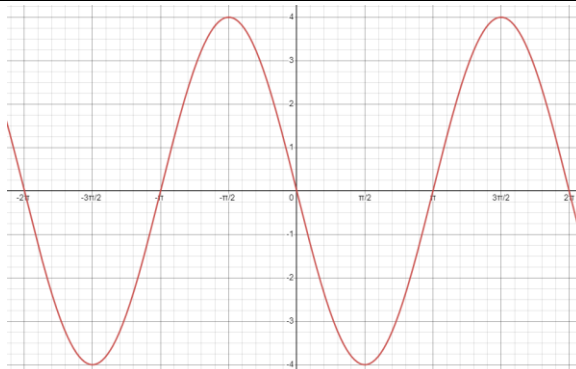
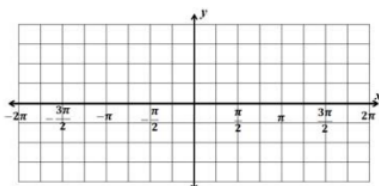
9. $y = -\cos 4x$

Amp: **1** Period: **$\frac{1}{2}\pi$** Freq: **$\frac{1}{\frac{1}{2}\pi} = \frac{2}{\pi}$**



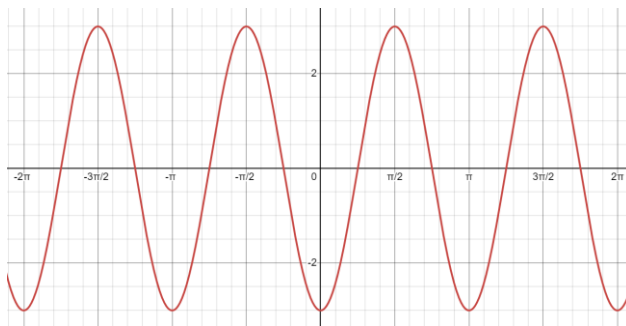
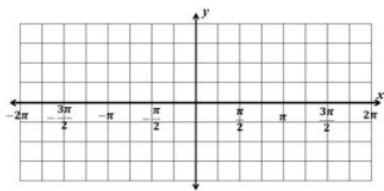
10. $f(\theta) = -4 \sin \theta$

Amp: **4** Period: **2π** Freq: **$\frac{1}{2\pi}$**



11. $y = -3 \cos 2x$

Amp: **3** Period: **π** Freq: **$\frac{1}{\pi}$**



12. $y = 2 \sin \frac{4}{3}x$

Amp: **2** Period: **$\frac{3\pi}{2}$** Freq: **$\frac{1}{\frac{3\pi}{2}}$**
 $= \frac{2}{3\pi}$

