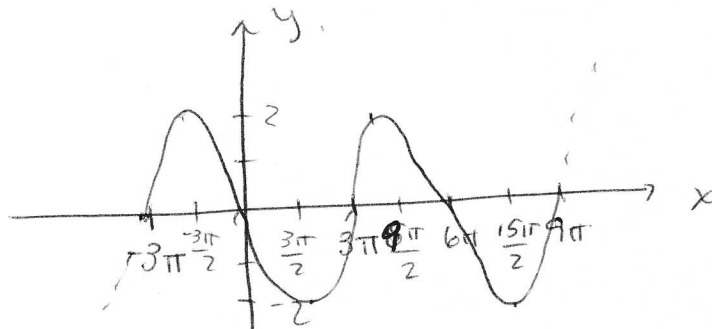


① Amplitude = 2

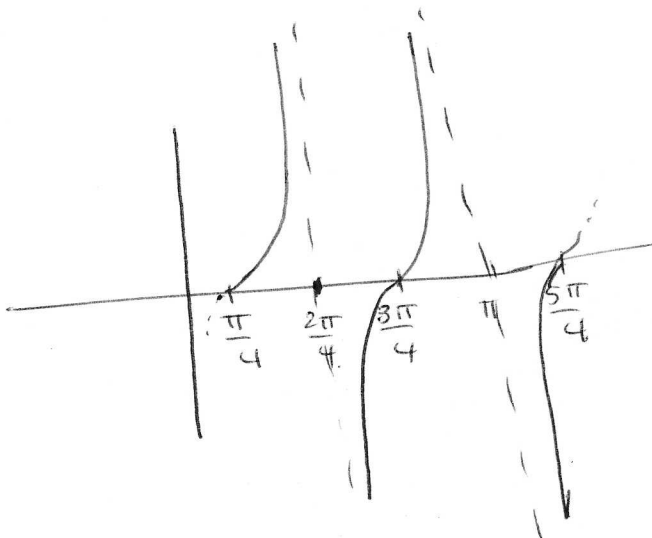
$$\text{Period} = \frac{2\pi}{\frac{1}{3}} = 6\pi$$

$$\text{Phase Shift: } \frac{1}{3}x + \pi = 0 \\ x = -3\pi$$



② period = $\frac{\pi}{2}$

Phase shift: $\frac{\pi}{4}$.



③ period = π

Amp = 5 = A

no phase shift

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

$$B = 2$$

$$y = 5 \sin 2x$$