

Identify the Amplitude and Period. Graph the following trigonometric functions.

9.  $f(x) = 5 \sin(4x)$   $\frac{2\pi}{4}$

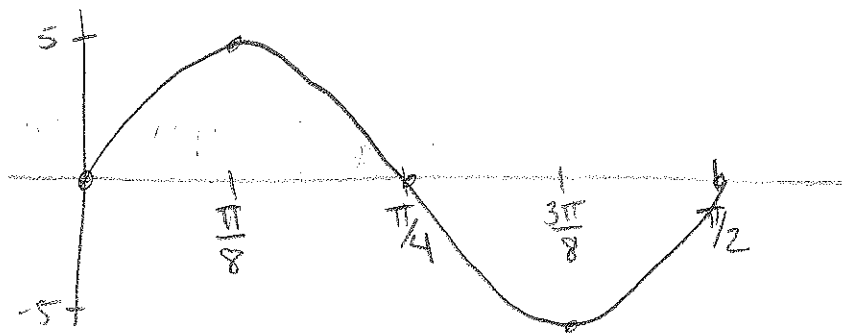
Amp: 5

Period:  $\frac{\pi}{2}$

Interval

$$\frac{\pi}{2} \cdot \frac{1}{4} = \frac{\pi}{8}$$

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



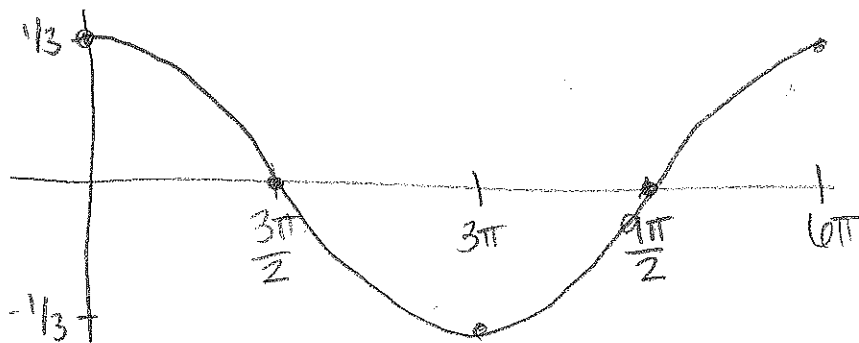
10.  $f(x) = \frac{1}{3} \cos\left(\frac{1}{3}x\right)$   $\frac{2\pi \cdot 3}{1}$

Amp:  $\frac{1}{3}$

Period:  $6\pi$

Interval  $\frac{6\pi}{4}$

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



11.  $f(x) = 4 \sin\left(\frac{2\pi}{3}x\right)$   $\frac{2\pi}{2 \cdot 3} \rightarrow \frac{2\pi \cdot 3}{1 \cdot 2\pi}$

Amp: 4

Period: 3

Interval  $\frac{3}{4}$

