

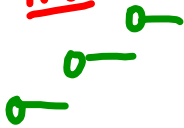
6.3 - Graphing Sine and Cosine Functions

LT37: I can graph the sine and cosine functions and perform transformations of amplitude, period, phase shift, and vertical shift.

Periodic - If the values of a function are the same for each given interval of the domain.

Ex.

NO



Yes

$$\underline{y = \sin x}$$

- * x-intercepts $\rightarrow \pi n$
- * y-intercept $\rightarrow 0$
- * Max values are $y = 1$ when $x = \frac{\pi}{2} + 2\pi n$
- * Min values are $y = -1$ when $x = \frac{3\pi}{2} + 2\pi n$

$$\underline{y = \cos x}$$

$$* \text{ x-intercepts } \rightarrow \frac{\pi}{2} + \pi n$$

- * y-intercept $\rightarrow 1$
- * Max values are $y = 1$ when $x = \pi n$ (n is even)
- * Min values are $y = -1$ when $x = \pi n$ (n is odd)