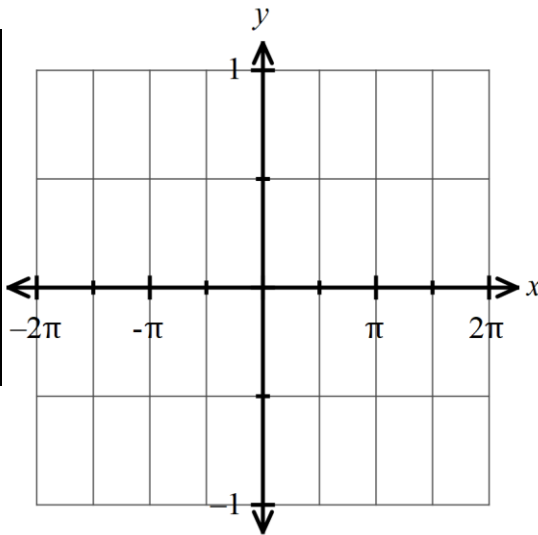


Name of Graph: _____

Equation: _____

x	$f(x)$



Key Features

Domain:

Range:

x -intercept(s):

y -intercept:

Increasing:

Decreasing:

Constant:

Amplitude:

Period:

Positive:

Negative:

Maximums /Minimums

Symmetry:

End Behavior:

$$\lim_{x \rightarrow -\infty} f(x) =$$

$$\lim_{x \rightarrow \infty} f(x) =$$

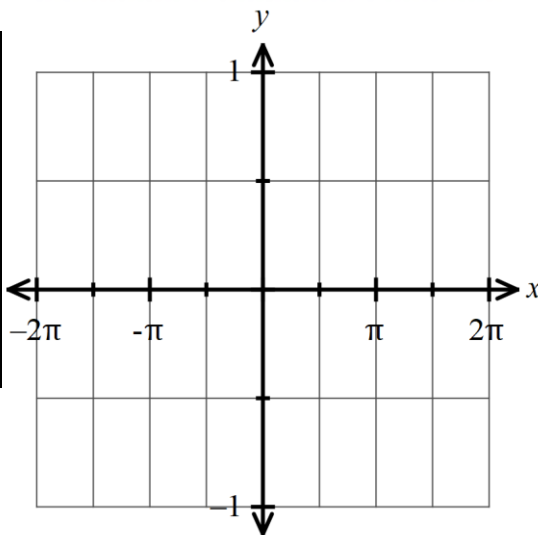
Vertical Shift:

Phase Shift:

Name of Graph: _____

Equation: _____

x	$f(x)$



Key Features

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x -intercept(s):

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$$\lim_{x \rightarrow -\infty} f(x) =$$

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Vertical Shift:

Phase Shift:

Steps for solving sine equation:

- ① get sine by itself
- ② use All Students Take Calculus to find what quadrants to use & if needed draw triangles
- ③ find reference angle
 - unit circle
 - use calc.
- ④ find angles in standard position
 - $\pm 180^\circ$ or -360°
 - $\pm \pi$ or -2π

ex. 1

$$\frac{6\sqrt{2} \sin \theta}{6\sqrt{2}} = \frac{3\sqrt{6}}{6\sqrt{2}}$$

$$\sin \theta = \frac{\sqrt{3}}{2}$$



unit 7
 $\sin^{-1}\left(\frac{\sqrt{3}}{2}\right) = \theta$

unit 6
use unit circle to find $y = \frac{\sqrt{3}}{2}$

ref $\angle = 60^\circ$

$$\theta = 60^\circ, 120^\circ$$

or
 $\theta = \frac{\pi}{3}, \frac{2\pi}{3}$

Steps for solving sine equation: