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Trigonometry



# Trigonometry Examples

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## Example Problem:

$$f(x) = 2 \sin(2x)$$

## Step-By-Step Solution:

Use the form  $a \sin(bx - c) + d$  to find the variables used to find the amplitude, period, phase shift, and vertical shift.

$$a = 2$$

$$b = 2$$

$$c = 0$$

$$d = 0$$

Find the amplitude ( $|a|$ ).

Amplitude :2

Find the period using the formula  $\frac{2\pi}{|b|}$ . Period : $\pi$

Find the phase shift using the formula  $\frac{c}{b}$ . Phase Shift :0

Find the vertical shift ( $d$ ).

Vertical Shift :0

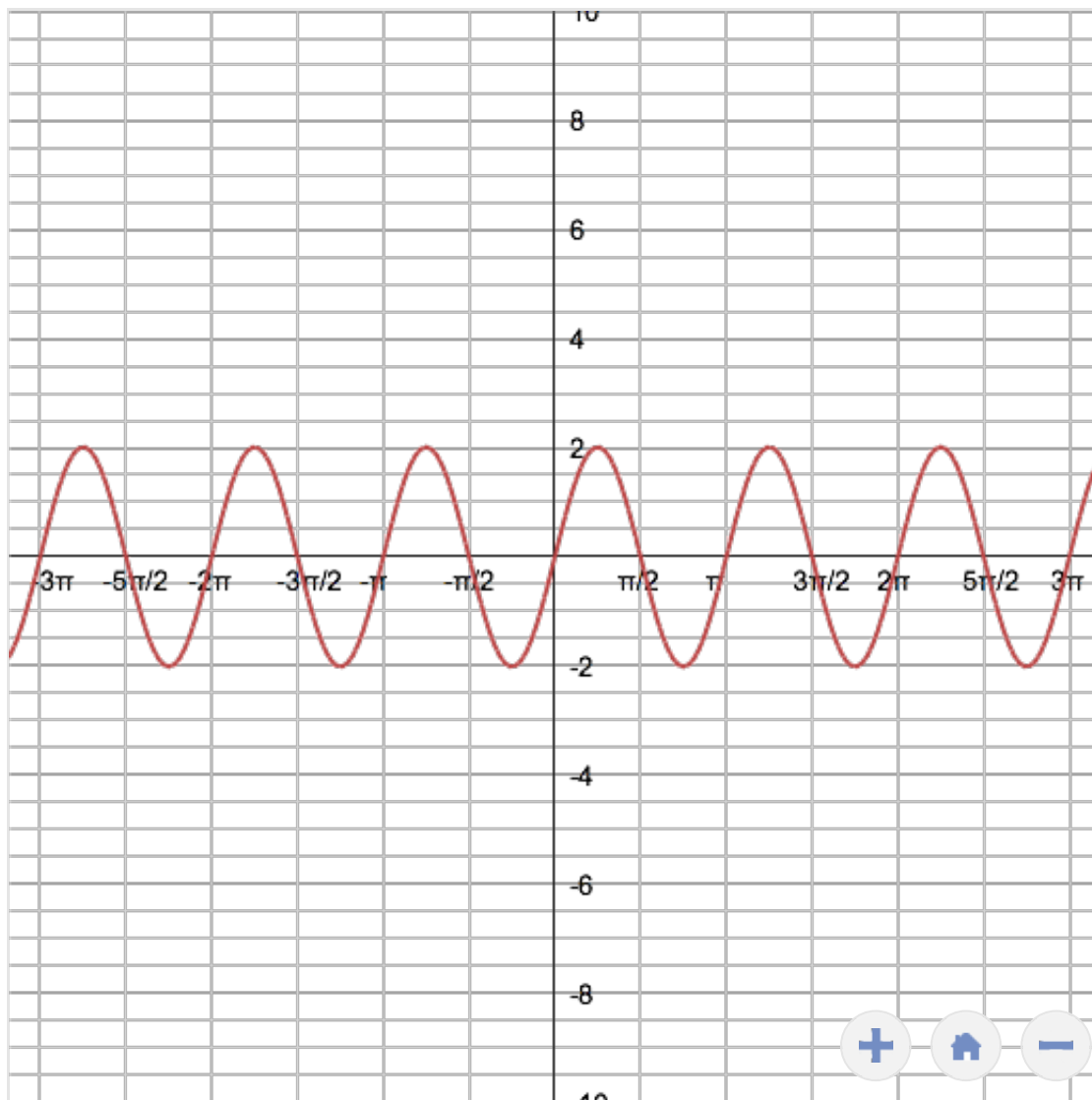
List the properties of the trigonometric function.

Amplitude :2

Period : $\pi$

Phase Shift :0(0 to the right)

Vertical Shift :0 ✓



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