Precalculus

Generate a formula from sine/cosine graph, amplitude and period modified

Todor Miley

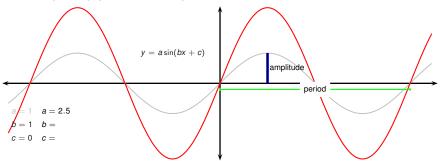
2019

• The graph of $a\sin(bx + c)$ is referred to as a "wave".

Definition (Phase, period, frequency, amplitude of a wave)

In the function $a\sin(bx+c)$, the number |a| is called the *amplitude* of the wave, the number $\frac{b}{2\pi}$ is called the *frequency* of the wave, the number $\frac{2\pi}{b}$ is called the *period* of the wave, the number c is called the phase of the wave.

• What happens when we change the amplitude? The frequency/period? The phase?

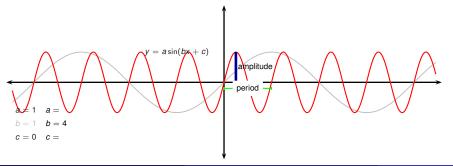


• The graph of $a\sin(bx + c)$ is referred to as a "wave".

Definition (Phase, period, frequency, amplitude of a wave)

In the function $a\sin(bx+c)$, the number |a| is called the *amplitude* of the wave, the number $\frac{b}{2\pi}$ is called the *frequency* of the wave, the number $\frac{2\pi}{b}$ is called the *period* of the wave, the number c is called the *phase* of the wave.

• What happens when we change the amplitude? The frequency/period? The phase?



• The graph of $a\sin(bx+c)$ is referred to as a "wave".

Definition (Phase, period, frequency, amplitude of a wave)

In the function $a\sin(bx+c)$, the number |a| is called the *amplitude* of the wave, the number $\frac{b}{2\pi}$ is called the *frequency* of the wave, the number $\frac{2\pi}{b}$ is called the *period* of the wave, the number c is called the *phase* of the wave.

 What happens when we change the amplitude? The frequency/period? The phase?

