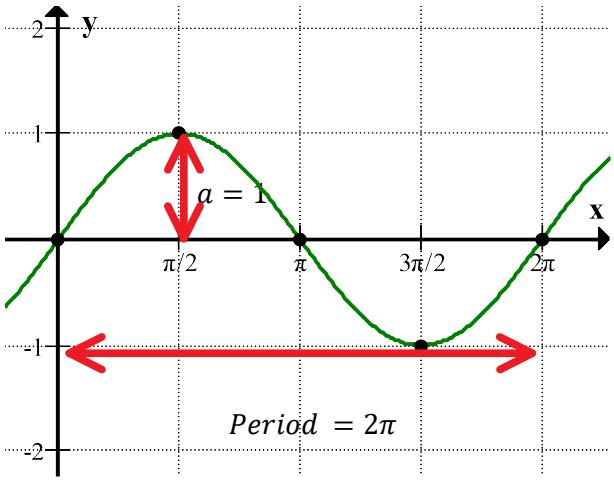
C12 - 5.2 - (a,b) Sine Transformations Notes

$$y = a\sin(b(x - c)) + d$$

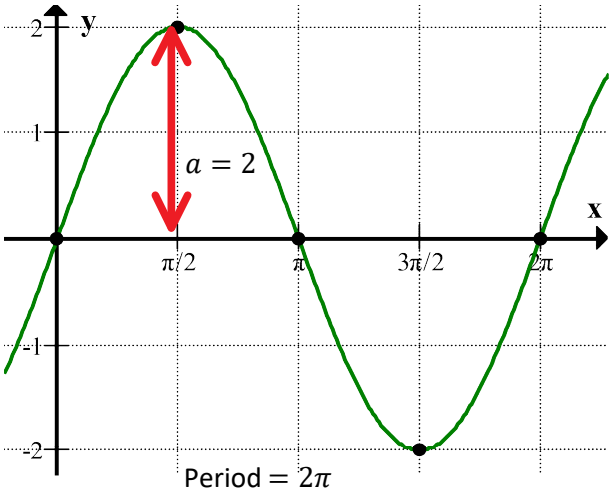
Amplitude | Period $= \frac{2\pi}{b}$ | Phase Shift | Center Line

$y = \sin(x)$



Amplitude Change

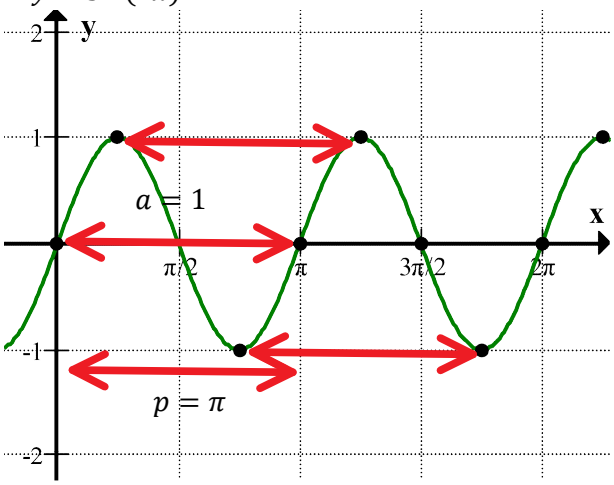
$y = 2\sin(x)$



$VE = 2$

Period Change

$y = \sin(2x)$



$HC = \frac{1}{2}$

$p = \frac{2\pi}{b}$

$p = \frac{2\pi}{2}$

$p = \pi$