

C12 - 5.3 - (d,c) Sinusoidal Transformations Notes

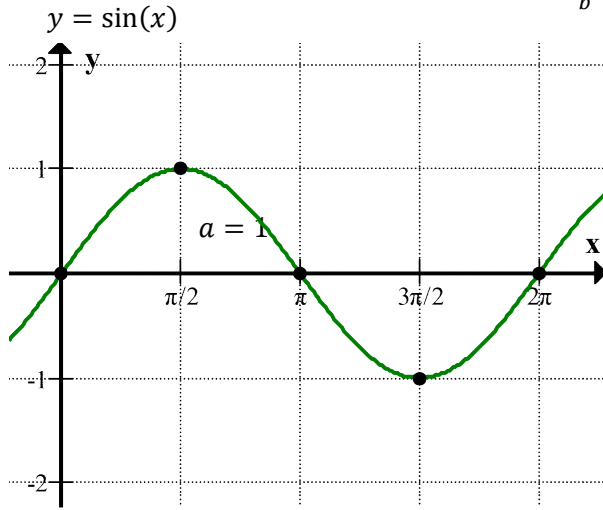
$$y = a \sin(b(x - c)) + d$$

Amplitude

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

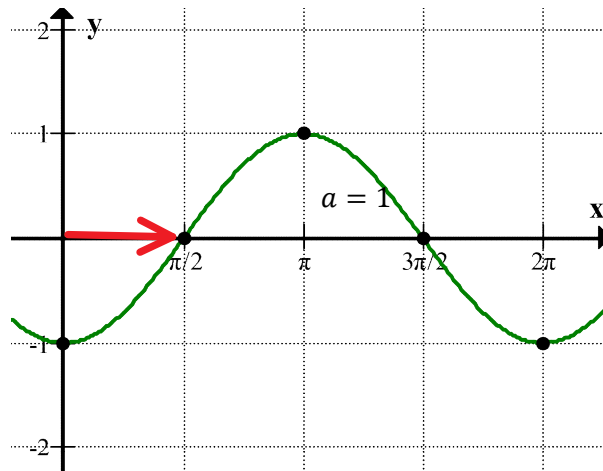
Phase Shift

Center Line



Phase Shift

$$y = \sin\left(x - \frac{\pi}{2}\right)$$

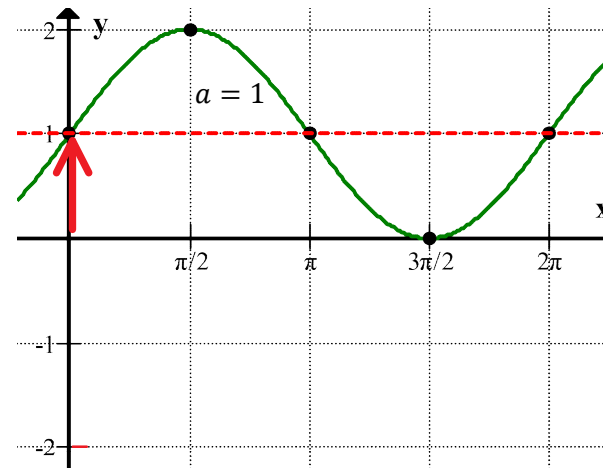


$$HT = \frac{\pi}{2}$$

Phase shift $\frac{\pi}{2}$ units to the right

Center Line Shift

$$y = \sin(x) + 1$$



$$VT = +1$$

up 1