

Practice Worksheet to find the amplitude, period, phase shift, and vertical shifts.

Remember the form of the equation is $y = A \sin(\omega\theta - \varphi) + c$

$$\text{Amplitude} = |A|$$

$$\text{Period} = \frac{2\pi}{\omega} \quad \text{Phase Shift} = -\frac{\varphi}{\omega} \quad \text{Vertical Shift} = c$$

Label the amplitude, period, phase shift, and vertical shift for each trig function below.

$$y = 5 \sin(\theta - \pi) \quad \text{amplitude } \underline{\hspace{2cm}} \quad \text{Period } \underline{\hspace{2cm}} \quad \text{Phase Shift } \underline{\hspace{2cm}} \quad \text{Vertical Shift } \underline{\hspace{2cm}}$$

$$y = 2 \sin(\theta + \pi) \quad \text{amplitude } \underline{\hspace{2cm}} \quad \text{Period } \underline{\hspace{2cm}} \quad \text{Phase Shift } \underline{\hspace{2cm}} \quad \text{Vertical Shift } \underline{\hspace{2cm}}$$

$$y = \sin(7\pi\theta - 4\pi) \quad \text{amplitude } \underline{\hspace{2cm}} \quad \text{Period } \underline{\hspace{2cm}} \quad \text{Phase Shift } \underline{\hspace{2cm}} \quad \text{Vertical Shift } \underline{\hspace{2cm}}$$

$$y = 3 \sin(\frac{\theta}{2}) \quad \text{amplitude } \underline{\hspace{2cm}} \quad \text{Period } \underline{\hspace{2cm}} \quad \text{Phase Shift } \underline{\hspace{2cm}} \quad \text{Vertical Shift } \underline{\hspace{2cm}}$$