## What is a Wave? Post-Assessment Key

## **Directions**

Answer the following questions the best you can. This is a graded assignment.

Given the equation for a sine wave below, answer the following questions:

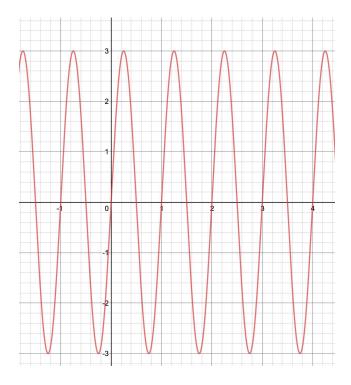
$$y(t) = 4.5\sin(6\pi t + 45) - 15$$

1. What is the **frequency** of the wave?

$$6*pi / 2*pi = 3$$

2. What is the **phase angle** of the wave, and how does this phase angle affect the graph of the wave? -45, the wave is shifted to the **left** by 45

Given the plot for a sine wave below, answer the following questions (assume the phase angle and vertical shift are equal to 0):



Name: Date: Class:

3. What is the amplitude of the sine wave?

3

- 4. What is the frequency of the sine wave? How did you calculate it?
- 1, there is exactly one cycle per second

