Name: _____

Chapter 7 - Section 7.1 Introduction to Periodic Functions

TICKET-IN-THE-DOOR

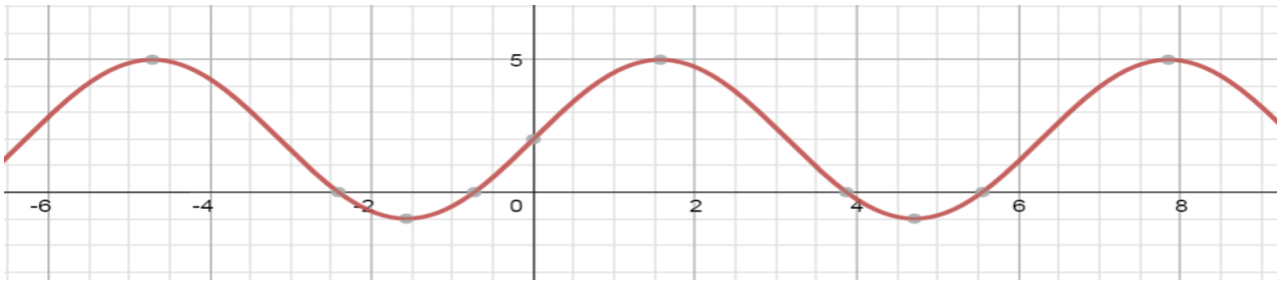
In order to be prepared for class you must watch the module and complete the following activity. This is due first thing when you get to class.

Describe the following:

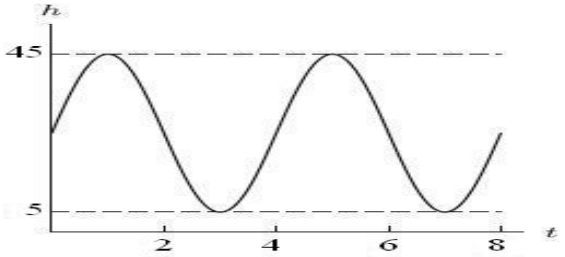
- Periodic Function
- Period
- Midline
- Amplitude

Check your understanding:

1. Determine the **midline**, **period** and **amplitude** and the **minimum** and **maximum** values of the function below. (Make sure you label the figure)



2. The graph to the right shows your height $h = f(t)$ in meters t minutes after a Ferris wheel ride begins.



   a. How many meters is the radius of the Ferris wheel?

   b. How long is one rotation of the Ferris wheel?

3. The London Ferris wheel is 135 meters in diameter and makes one revolution every 30 minutes. Let $y = h(t)$ be the height above ground after t minutes of riding. Graph $y = h(t)$ and label the **period**, the **amplitude** and the **midline**.