Formative Assessment #25 – The Vocabulary of Sinusoidal Functions

- I can demonstrate an understanding of the following terms: period, local maximum, local minimum, equation of the axis of symmetry and amplitude.

1. Fernando the Wonder Dog is riding on a Ferris Wheel. His height above the ground varies with time. At $t = 4$ seconds he is at his maximum height of 12 m and at t = 12 seconds he is closest to the ground at a height of 2 m.

   a) What is the period and what does it represent in this situation?

   b) What is the amplitude and what does it represent in this situation?

   c) What is the equation of the sinusoidal axis and what does it represent in this situation?

   d) What was Fernando's initial height above the ground?