1. Al Jabra is riding on a Ferris wheel with an entry point similar to the unit circle. The Ferris wheel has a radius of 4 meters. Al has rotated counterclockwise $\frac{5\pi}{6}$ radians when the Ferris wheel stops to load other passengers. What are the coordinates of Al's position when he stops? Explain how you obtained your answer.

2. The average monthly temperature at RDU Airport from 1970 to 2010 can be modeled by this equation:
$$y = 18\sin\left(\frac{\pi}{6}x\right) + 64$$

    a) What is the period of this function?

    b) What does it mean in the context of this problem?

    c) What is the amplitude of this function?

    d) What does it mean in the context of this problem?