**Solutions to Basic Wave Concept Problems:**

**Problem #1:**

1. What is the period and frequency of the minute hand of a clock?

***Solution:***

The minute hand takes 60 seconds to make one complete cycle – that is the period **T = 60s**. Therefore, the frequency is 1/T, 1/60 **= 0.0167Hz**, (or 0.0167 cycles per second)

**Problem #2:**

1. New York’s 300-m high Citicorp Tower oscillates in the wind with a period of 6.80 s. Calculate its frequency of vibration.

***Solution:***

T = 6.80 s, f=1/T = 1/6.80 = **0.147Hz**

**Problem #3:**

1. The speed of light is 3.00 x 108 m/s. What is the wavelength for an FM radio signal broadcast at 105.3 MHz? (Note, radio waves all travel at the speed of light – we will discuss when you return to the project)

***Solution:***

