Simple Harmonic Motion Prelab
Due start of class, week of Nov 11

Name:_____ Section:_____

In the write up for this lab, we derive equations for displacement (eqn. 8), velocity (eqn. 9), and acceleration (eqn. 10) as a function time for an object on a spring moving under simple harmonic motion.

Show, using dimensional analysis, that the amplitudes of the relations for velocity, $A\sqrt{\frac{k}{m}}$, and acceleration, $-A\frac{k}{m}$, are what you expect.

Derive the velocity and acceleration amplitudes for a simple pendulum (small angle approximation) and show that they too are what you expect.