

Name: _____

Class: _____

Due Date: _____

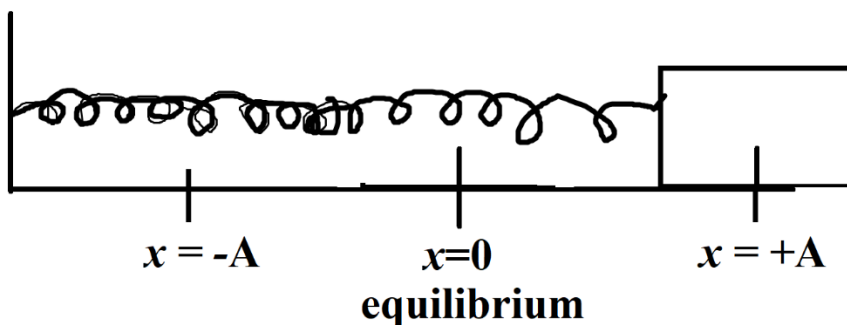
Physics Topic 11D – Applying Newton’s Second Law of Motion to Springs

Answer the following questions. The solutions to this worksheet can be found on the YouTube channel Go Physics Go.

1. C: Explain what is meant by the *equilibrium position* of a mass attached to a spring on a horizontal surface.

2. C: What is the equation for the *spring force*? Define each variable. What is the name and what are the units of k in the spring force equation?

3. C: Label the forces on a mass attached to a spring on a horizontal surface which is stretched a distance $x = +A$ from its equilibrium position and then released.



4. C: Draw a *force vs. displacement* graph for a mass on a spring. What does the slope of a *force vs. displacement* graph tell us? What does the area under a *force vs. displacement* graph tell us?