Math 216 - Quiz 9

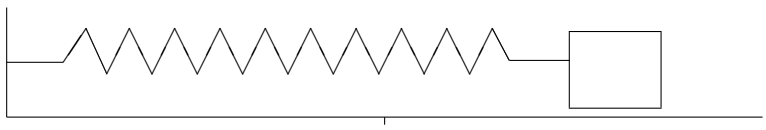
November 11, 2015

Name _____

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (10 points) A 1/2-kg mass is attached to a spring with spring constant 4 N/m. The damping constant for the system is 1/2 N-sec/m. The mass is moved 1 m to the left of equilibrium (compressing the spring) and pushed to the left at 1 m/sec. Find the equation of motion. Write your final result in terms of a single trig function with phase shift. Graph your solution[1] and attach a copy.



$x = 0$
(Equilibrium)

[1] If you don't have a good plotting program, try one that is available online such as http://fooplot.com.