

MATH 361 Quiz 6**Name:**

Show all work. 10 points.

1. After a mass weighing 10 pounds is attached to a 5-foot spring, the spring measures 7 feet. The system is placed in a medium that offers a damping force numerically equal to the instantaneous velocity. Find the equation of motion if the mass is initially released from a point $1/2$ foot below the equilibrium with a downward velocity of 1 ft/sec.