Quiz #1 Physics 220
Fall 2013

Name: _____

1. Please provide a 5 digit number of your choosing. This number will be used to identify your grade on online grade updates.

For all of the following questions show all your work and use the appropriate number of significant figures.

2. Convert 45 m/s to miles per hour.

3. What are the SI units for Mass: _____, Distance: _____ and time: _____

4. A lady bug travels 1.25 meters to the East and 1.70 meters to the South. Find the magnitude and direction of the ladybug's displacement vector. (Include a clearly labeled diagram)

5. Draw a motion diagram for the following scenarios (show and label the velocity vectors):
   a. A pumpkin falling off a roof.
   b. A tired Subaru leaving a stop sign.
   c. A runner jogging at a constant speed.

1 mile = 1609 meters	1 kilometer = 0.621 miles	100 centimeters = 1 meter
1 hour = 3600 seconds	$a^2 + b^2 = c^2$	
Sin θ = opp/hyp	cos θ = adj/hyp	tan θ = opp/adj