COSC150: MOU (Measure of Understanding)   Name_____

1. We have asserted that knowledge acquisition and scientific methods can be understood as three basic human processes. What are they?

2. For purposes of this course, how have we defined "investigation"?

3. List as many of the characteristics that make an investigation a "scientific investigation."

4. A model that has at least one element of randomness can be described as:

   _____

5. A model whose behavior depends solely on its parameter values and the initial conditions, yielding the same result each time, can be described as

   _____

6. There are 5 apples on a table. You take away 3. How many apples do you have?

7. Consider a dataset from an experiment incorporating a large number (N) of independent observations. In words, briefly describe what each of the following **measures** or **predicts** with respect to that dataset:

   a. Average

   b. Standard Deviation

   c. Standard Error