Probability/Statistics
Worksheet 1.1-1.2

NAME_____

A company making windows maintains its high quality by selecting at random 10 windows to be tested each day.

1. What is the population?

2. What is the sample?

3. If the manager decided to test a random sample of 25 windows on Monday and none the rest of the week, could he/she draw a logical conclusion for the upcoming week? Explain.

A company making radar devices maintains quality control by testing a random sample of 20 such devices produced each day.

4. What is the population?

5. What is the sample?

6. If the manages test a random sample of 100 devices on the last day of the week, could he/she draw a logical conclusion for the entire week?

At a used car lot the following information is obtained about one of the cars.

(a) Pontiac Grand Prix   (f) Very Clean
(b) 1999   (g) $4,500
(c) White   (h) FA16248
(d) 6 Cylinders   (i) 82,000 Miles
(e) 25 mpg   (j) 0 – 60 in 5.8 seconds

For the information above, list the level of measurement that applies: <u>nominal</u>, <u>ordinal</u>, <u>interval</u>, or <u>ratio</u>.

Categorize the style of gathering data (sampling, experiment, simulation, or census).

7. Look at all the apartments in a complex and determine the monthly rent charged for each unit.

8. Give one group of students a flu vaccination and compare the number of times these students are sick during the semester with the number of students who get sick in a group who did not receive the vaccination.

9. Select a sample of students and determine the percentage who is taking mathematics this semester.

10. Use a computer program to show the effects on traffic flow when the timing of stoplights is changed.

Answer each of the following.

11. What would be the first 5 random numbers selected, 11-50, from the following number table.

     42156 48073 51462 20932 64735

12. Find the first 10 numbers from a population size of 750 using row 8, block 4 on Page 577 of your book.