Date _____ Period _____

Final Exam Review—Chapters 1 & 2

____ 1. All 120 employees of a company is selected, and the average age is found to be 37 years. Is the given value a statistic or parameter?

a. Statistic b. Parameter

_ 2. The number of seniors at a particular high school is 204. Can this number be classified as continuous or discrete?

a. Continuous b. Discrete

3. Surveys responses of "agree, disagree, or don't care" are collected. Determine which of the four levels of measurement is most appropriate.

a. Nominal b. Ordinal c. Interval d. Ratio

4. Heights of a class of statistics students can be best described using which of the four levels of measurement?

a. Nominal b. Ordinal c. Interval d. Ratio

5. The county collects information about obesity by studying eating habits of a group of people for the next 20 years. Identify the type of observational study.

a. Retrospective b. Cross-sectional c. Prospective

_ 8. The name of each student in a class are written on a piece of paper, the slips of paper are placed in a bag and 10 names are chosen to determine the order of project presentations. Identify which type of sampling is used.

a. Systematic b. Convenience c. Cluster d. Stratified e. Random

9. Using the employment information in the table from the Alpha Corporation, to answer questions a-e:

Years Employed at Alpha Corporation							
<u>Years of Service</u>	Number of						
	<u>Employees</u>						
1-5	5						
6-10	20						
11-15	25						
16-20	10						
21-25	5						
26-30	3						

- a. Find the class width:
- b. Find the class boundaries:
- c. Find the class midpoint:
- d. Find the upper class limits:
- e. Find the lower class limits:
- 10. A survey of the 9564 vehicles on the campus of a State University yielded the following circle graph. Find the number of convertibles (rounded to the nearest whole number).





11. Refer to the following graph and describe the distribution of the data.

12. "45% of students in the United States use their school library at least once a week." This conclusion was reached by a college student after she had sent a survey to all undergraduate students at her college. What is wrong with her survey?

13. Describe the key characteristics of a normal distribution.

14. Circle all of the types of graphs that you could construct in order to analyze the nature of the data to determine if it is normally distributed, skewed to the left, skewed to the right, or uniformly distributed.

histogram	stemplot
relative frequency histogram	dotplot
cumulative frequency histogram	scatter plot
ogive	pie chart
frequency polygon	relative frequency polygon
pareto chart	time series graph

15. The following sample represents scores on a recent Science test. Use this data to answer questions a-e:

85 77 93 91 74 65 68 97 88 59 74 83 85 72 63 79

a. Construct a frequency table of 5 classes.

b. Use your table from part a to construct a histogram.

c. Use your table from part a to construct a relative frequency distribution.

d. Use your table from part b to construct a relative frequency polygon.

e. What similarities and differences do you notice when comparing your histogram from part b with the relative frequency polygon from part d?

16. You collect the heights in inches from a sample of seniors at your high school. Use the following data to answer questions a and b.

<u>Height</u> <u>(inches)</u>	Frequency
69.0—71.9	9
72.0—74.9	13
75.0—77.9	17
78.0—80.9	11
81.0-83.9	5

a. Construct a cumulative frequency distribution that corresponds with the given frequency distribution.

b. Use your cumulative frequency distribution from part a to construct an ogive.