Date ___________________ Name_______________________

Chapter 5 Getting Started

Comparing Salaries

The payrolls for three small companies are shown in the table. Figures include year-end bonuses. Each company has 15 employees. Sam wonders if the companies have similar "average" salaries.

What is the best indicator of an "average" salary for each company?

Employee Payrolls ($)		
Media Focus Advertising	Computer Rescue	Auto Value Sales
245 000	362 000	97 500
162 000	112 000	66 900
86 000	96 500	64 400
71 000	96 500	63 800
65 000	63 000	62 800
61 000	62 500	62 300
61 000	59 200	61 500
57 500	59 000	58 900
47 400	56 500	58 300
42 500	55 900	58 200
39 500	55 200	57 900
36 200	53 800	57 300
33 400	53 100	56 900
28 500	52 700	55 250
27 300	52 300	55 250

1. What is the range of salaries for each company?

	Media Focus	Computer Rescue	Auto Value
Range			

2. Examine the data. Which companies have data that would be considered **outliers**? Tell how you know.

3. Determine the measure of central tendency (mean, median & mode) for the salaries for each company.

	Media Focus	Computer Rescue	Auto Value
Mean			
Median			
Mode			

4. Which measure of central tendency is most affected by outliers?

5. Create a **line plot** for each of the three companies. Look for outliers, measure of central tendency, and the range on your line plots. Which of these features are easily visible?

6. Which measure of central tendency best illustrates the "average" salary for each company? Why?

	Measure	Why?
Media Focus		
Computer Rescue		
Auto Value		

What do YOU think?

Decide whether you agree or disagree with each statement. Explain your decision.

A. To compare two sets of data, you need only the mean, the median and the mode.

B. Most sets of data are evenly distributed about their mean.

C. By looking at the data for a survey, you can decide if the results for the sample that was surveyed closely match the results you would get if you surveyed the whole population.