

## Chapter 21 point extra credit

## Answer all questions on a separate piece of paper. You must show ALL work to receive full credit.

1. Provide a brief answer to the following questions:
a. Describe the two major types of variables described in the beginning of Chapter 2.
b. Give an example of each type of variable.
2. Briefly describe the four types of measurement scales discussed in class.
3. Briefly describe the strengths and weaknesses of the three measures of central tendency, including what each one measures.
4. Briefly describe the strengths and weaknesses of the two measures of dispersion, including what each one measures.
5. (A) Sketch a negative and positively skewed distribution. (B) Sketch a symmetric distribution. (C) Indicate approximately where the three measures of central tendency are located in each distribution.
6. Using Excel, create a pie chart and a bar graph for the data below:
*Note: Make sure your charts have titles. Also make sure that the pieces of your pie chart and bars in your bar graph are labeled and show the percentage for each category as well.

A recent survey obtained the following results regarding internet service providers in the Albuquerque metropolitan area:

| Internet Service Provider | \% Subscribing |
| :--- | :---: |
| AOL | $20 \%$ |
| Comcast | $23 \%$ |
| Earthlink | $12 \%$ |
| MSN | $15 \%$ |
| PeoplePC | $10 \%$ |
| Quest | $15 \%$ |
| Walmart/Netscape | $5 \%$ |

7. When should you use a pie chart or bar graph and when should you use a histogram?
