

Chapter 2.1-2.5 Worksheet

1. Use the following table to the questions below:

Height (inches)	Frequency
50 – 52	5
53 – 55	8
56 – 58	12
59 – 61	13
62 – 64	11

- a. class width
- b. class boundaries
- c. class midpoints
- d. Mean
- e. Median class
- f. Modal class
- g. variance
- h. Sample Standard deviation
- i. Construct a relative frequency histogram

- j. Is the distribution of the histogram normal, positively, or negatively skewed? Why?

2. Use the following table to answer the following questions.

Job Sources	Frequency
Newspaper	72
Online	124
Search Firms	69
Mailings	32
Networking	102

- a. What percent does each source represent in the survey?
- b. If you had to construct a pie chart using this data, what would the angles be for each source?

3. Use this data set to answer the following questions.

14	21	39	29	31	36	38	57	42	48	41
27	40	57	53	51	48	68	63	61	78	

- a. Construct a stem-n-leaf plot
- b. Does the distribution seem normal, positive, or negatively skewed? Why?
- c. Mean.
- d. Median
- e. Mode
- f. Variance

g. Sample standard deviation

4. Here are the batting averages for Mark McGuire and Mark McLemore for 13 recent years.

McGuire:	.236	.240	.243	.150	.148	.246	.284
	.257	.261	.290	.261	.247	.257	

McLemore:	.189	.289	.260	.231	.235	.201	.268
	.333	.252	.274	.312	.274	.299	

Which player is more consistent and explain your reasoning?

5. You are the maintenance engineer for a local high school. You must purchase fluorescent light bulbs for the classrooms. Should you choose Brand A with mean 3000 hours and standard deviation of 200 hours or Type B with a mean 3000 hours and standard deviation of 250 hours? Explain your answer.
6. Adult IQ scores have a bell-shaped distribution with a mean of 100 and a standard deviation of 15. Use the Empirical Rule to find the percentage of adults with scores between 70 and 130.
7. Heights of adult women have a mean 63.6 inches and a standard deviation of 2.5 inches. What does Chebyshev's theorem say about the percentage of women with heights between 58.6 in and 68.6 in?