Name _____ Date _____ Period _____

## **Ch 4 Comparing Distributions: Height**

Directions: We are going to measure our height in inches, then use the data.

| 1 | | 11 | | 21 | |
|----|---|----|---|----|---|
| 2 | | 12 | | 22 | |
| 3 | | 13 | | 23 | |
| 4 | | 14 | | 24 | |
| 5 | | 15 | | 25 | |
| 6 | | 16 | | 26 | |
| 7 | | 17 | | 27 | |
| 8 | | 18 | | 28 | |
| 9 | | 19 | | 29 | |
| 10 | | 20 | | 30 | |

1) Find the mean for the class, then by gender.

2) Find the standard deviation for the class, then by gender.

3) What does the standard deviation tell us in accordance to this data?

4) Find the 5-number summary based on gender.

5) Find the range and IQR based on the class, then by gender.

6) Make a stem-and-leaf plot for each gender.

7) Make a histogram for each gender.
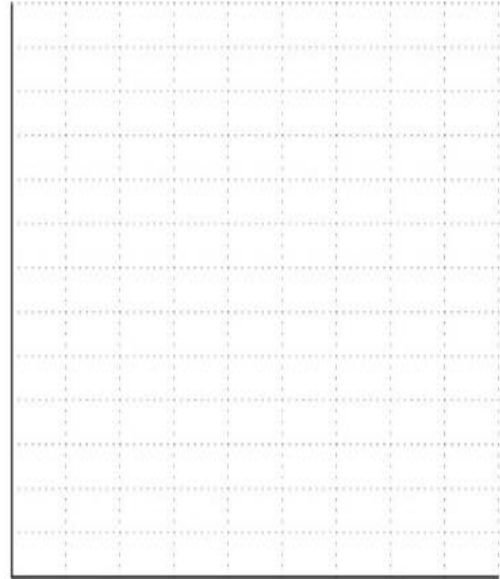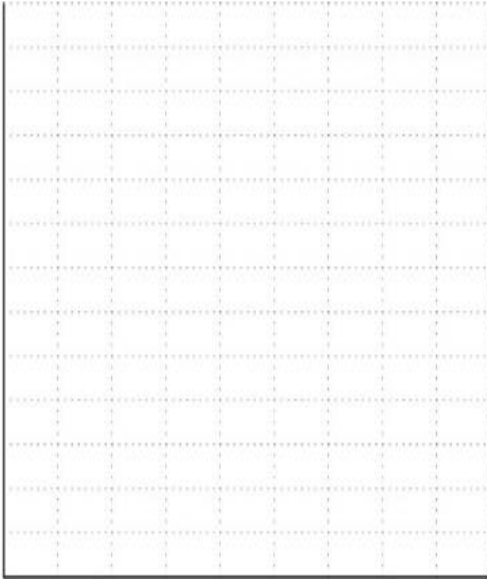
8) Describe your shape, center, and spread based on the histogram. Does this differ from stem-and-leaf? Why or why not?

9) Make boxplots based on gender.
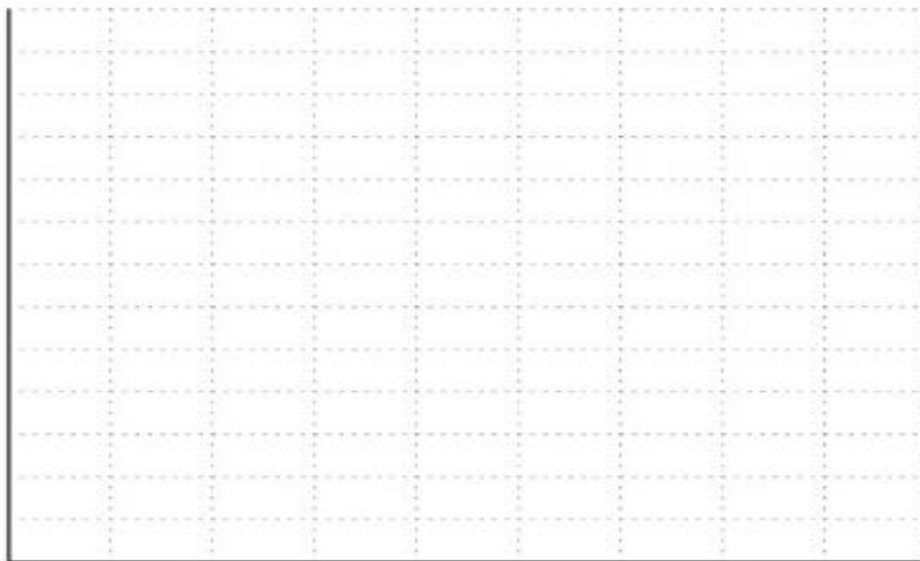
10) In a paragraph, compare the distribution of data by gender. Use vocabulary and statistical values to support your conclusions.