

1. Create a double stemplot using the two stemplots given:

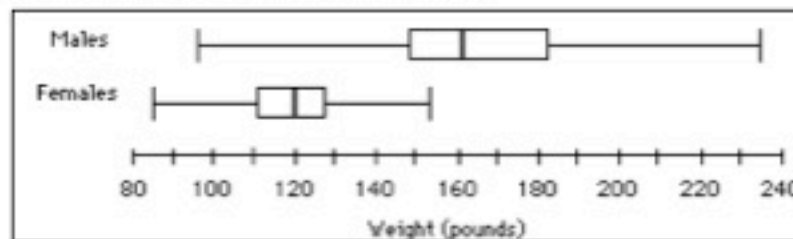
**Chapter 6 Test Scores**

Class A		Class B	
Stem	Leaves	Stem	Leaves
4	9	4	
5	5, 7	5	2, 7
6	6, 6, 8	6	2, 5, 8, 8
7	2, 8, 8, 8	7	2, 5
8	4, 5, 7, 8, 8	8	1, 4, 5, 7, 7
9	1, 5, 5	9	0, 1, 1, 5, 5, 5
10	0, 0	10	0

**Key:** 4 | 9 means 49%

2. The following boxplots summarizes weights of the male and female students in a class:

Circle all of the following which are NOT correct.



- (a) About 50% of the male students have weights between 150 and 185 pounds.
- (b) About 25% of female students have weights more than 130 pounds.
- (c) The median weight of male students is about 162 pounds.
- (d) The mean weight of female students is about 120 pounds because of symmetry.
- (e) The male students have less variability than the female students.

3. Barry Bonds and Babe Ruth are two of the most successful hitters in baseball history. The following data represents the number of HRs each hitter hit in their career:

**Barry Bonds** (1986 – 2007): 16, 25, 24, 19, 33, 25, 34, 46, 37, 33, 42, 40, 37, 34, 49, 73, 46, 45, 45, 5, 26, 28

**Babe Ruth** (1915 – 1935): 4, 3, 2, 11, 29, 54, 59, 35, 41, 46, 25, 47, 60, 54, 46, 49, 46, 41, 34, 22, 6

Complete parallel boxplots of the distribution of HRs hit over the hitters' careers. Then, use sentences to compare the distributions.



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\_\_\_\_\_

\_\_\_\_\_

4. Vertical boxplots are similar to horizontal boxplots. Use the boxplots to determine if the statements are true or false.

Statement	Circle One!	
a. The cheapest homes are in City 1.	True	False
b. City 3 has the greatest standard deviation.	True	False
c. City 2 has the greatest interquartile range.	True	False
d. The median sale price in City 3 is smaller than the minimum home price in City 1.	True	False
e. The top 50% of homes in City 2 cost more than all of the houses in City 2 and City 3.	True	False
f. City 3 has the smallest variation in home sale prices.	True	False



4. Multiply:  $(3 - 2x)^2$

5. Solve the following equation for  $y$ :  $1.2x - y = 12$

6. Solve the following system:

$$\begin{cases} 2x - y = -100 \\ 2x + 2y = 200 \end{cases}$$