Name: Key

UNIT 10 – DAY 6

HOMEWORK

1. The stem-and-leaf plot represents the pulse rate of students in a math class. First organize the data and determine if there is an outlier. If there is, remove it. Then create a box-and-whisker plot of the data.

68 68 68 69 70 71 71 74 76 76 78 82 86 88 88 90 96 104 110

Q1: 70 | median: 76 | Q3: 88

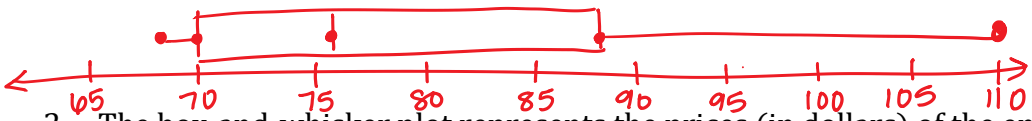
pulse rate

6	8 8 8 9
7	0 1 1 4 6 6 8
8	2 6 8 8
9	0 6
10	4
11	0

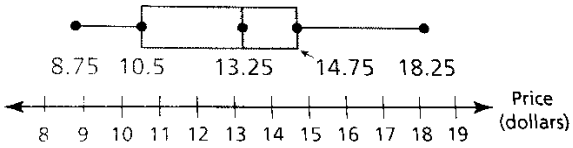
IQR: $88 - 70 = 18 \times 1.5 = 27$

$43 - 115$ (no outliers)

skewed right



2. The box-and-whisker plot represents the prices (in dollars) of the entrees at a restaurant.



a. Find and interpret the range of the data.

range: 9.5 The prices vary by no more than $9.50.

b. Describe the distribution of the data.

25% of prices $8.75–$10.5 25% $14.75–$18.25 } skewed right

50% of prices $10.50–$14.75

c. Find and interpret the interquartile range of the data.

IQR: 4.25 The middle half of the prices vary by no more than $4.25.

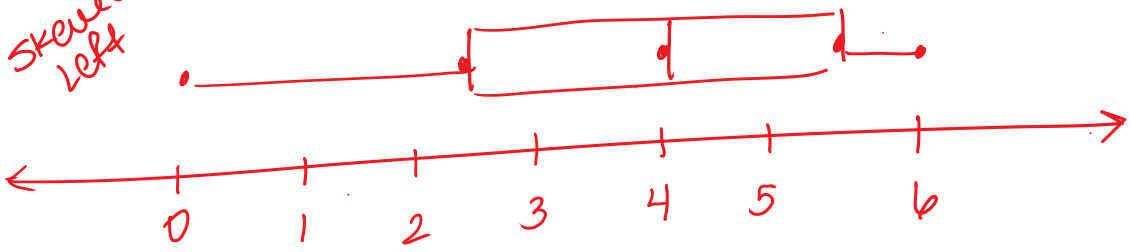
d. Are the data more spread out below Q1 or above Q3? Explain.

above Q3, because whisker is longer.

3. The following data set represents the number of hours of television watched by students: Make a box-and-whisker plot and describe the distribution.

0 3 4 5 2 4 6 5

0 2 3 | 4 4 5 5 6

Q1: 2.5 med: 4 Q3: 5.5

skewed left