

DESCRIPTIVE STATISTICS

SSE5210

1)

(a) double stem-and-leaf diagram

0	2
0	5 7
1	1 2 2 3 4 4 4 4
1	5 5 6 6 7 9
2	0 1 1 2 3
2	5 6 8 9
3	0 0 1
3	7 7
4	0 1
4	5
5	1
5	8

0|2 is 0.2

(b) No, The distribution is skewed right.

(c) $\bar{x} = 2.31$ median = 2.05

Median is the best measure since the distribution is not normally distributed.

(d) $s \approx R/4 \approx 5.6/4 \approx 1.4$

(e) $s = 1.29$, $s^2 = 1.6745$

2)

2, 3, 4, 5, 6, 6, 6, 7, 8, 9, 9, 10, 22

the position of the median is $0.5(n+1) = 0.5(13+1) = 7$ and $m = 6$.

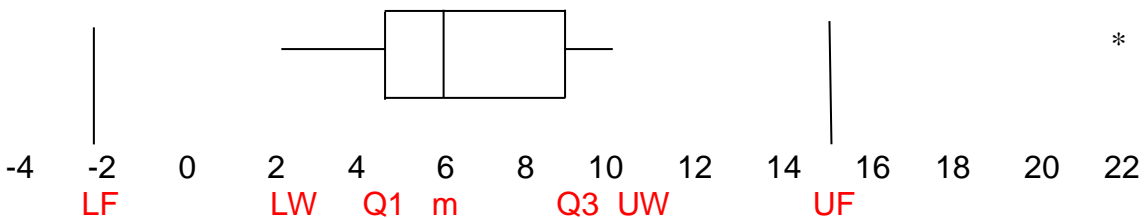
The position of $Q_1 = 0.25(n+1) = 3.5$ and the position of $Q_3 = 0.75(n+1) = 10.5$,

$Q_1 = 4.5$, $Q_3 = 9$, and $IQR = 9 - 4.5 = 4.5$.

The lower and upper fences are:

$$Q_1 - 1.5IQR = 4.5 - 6.75 = -2.25$$

$$Q_3 + 1.5IQR = 9 + 6.75 = 15.75$$



The distribution is skewed left and 22 is outlier