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MATH 080  
20 July 2020

### **Homework #2**

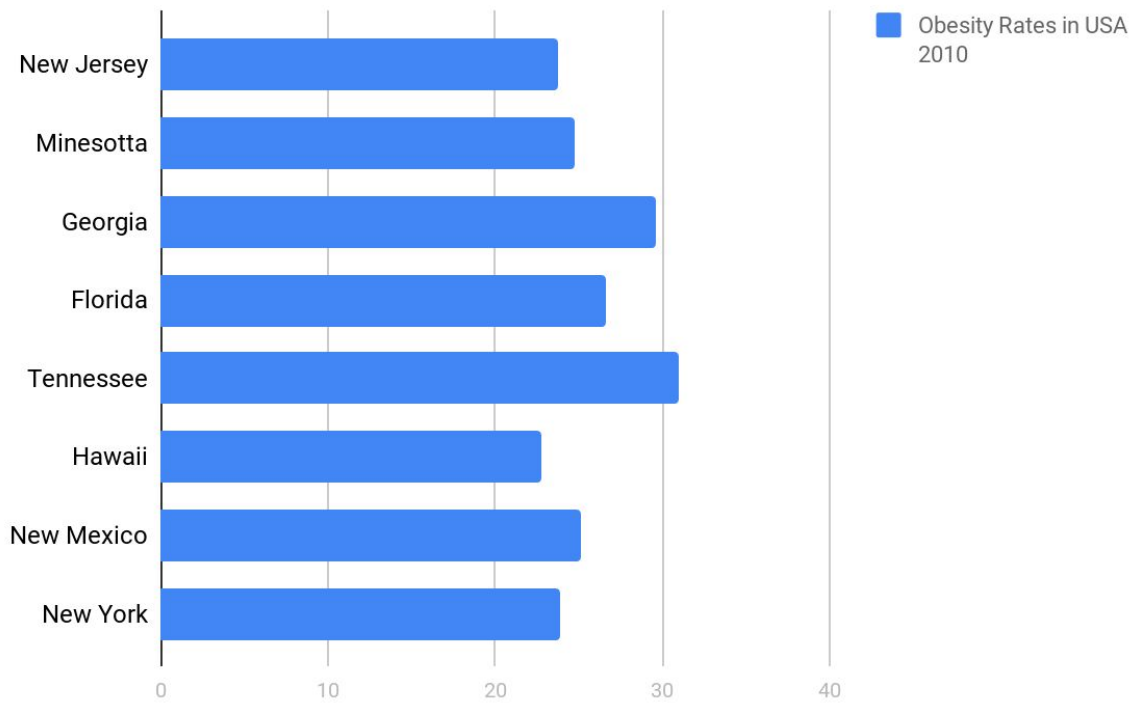
74,75a,76,78,79,80,83,84,88,92,93,94-99

74a.

| STEM | LEAF    |
|------|---------|
| 5    | 1       |
| 7    | 6,7,8,9 |
| 8    | 1,2,4,6 |
| 9    | 9       |

74b. The 51 is an outlier because it is far from the other points

75a.



76a.

| Rel. Freq. 2.62 | Rel. Freq. 2.63 | Rel. Freq. 2.64 |
|-----------------|-----------------|-----------------|
| 0               | .04             | .025            |
| .083            | .083            | .07             |
| .125            | .136            | .375            |
| .25             | .266            | 3.25            |
| .5              | .5              | 8.5             |
| .83             | 1.4             |                 |
|                 | 9               |                 |

76b.

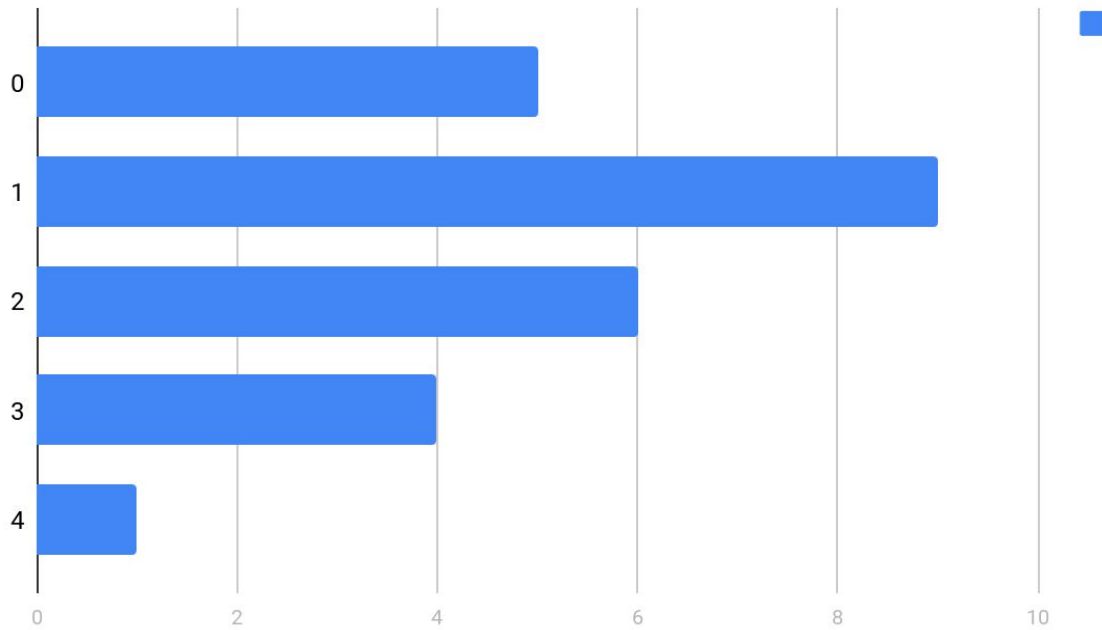
76c. The bar graphs in A and B are not identical because they have different frequencies and numbers of books. The publishers have different publish rates

76d. I did not expect the C graph to look like the A and B graph because in the C graph there are two bars. In A and B there is only one

76f. The bins are alike now because there are two rows for each of the graphs

78a.

# of movies watched in a week



78b.

| # of movies | frequency | Relative frequency | Cumulative frequency |
|-------------|-----------|--------------------|----------------------|
| 0           | 5         | .2                 | 5                    |
| 1           | 9         | .36                | 14                   |
| 2           | 6         | .24                | 20                   |
| 3           | 4         | .16                | 24                   |
| 4           | 1         | .04                | 25                   |

79. 41% of people who own at most 3 tshirts costing 19\$ each

80. B. simple random

83.

84a. 4th quarter spread 1

B. 2nd quarter spread 8

C.  $Q3 - Q1 = 11$

D. 10-13 are 2 quarters

E. V

88.a

i. the mean and median of data point on set 2 are more centered towards two

ii. They could have the same mode because it is in the majority or the data

iii.

B.

92. 26.4%

93a. Rising median age in population means longer life span

B i. decrease births

ii. Decrease deaths

C.

94. Median is what's in the middle. The median of 11 years will be 6.

95. A. 1447.5 FTES or less

B. 528.5 FTES or more

96. STDV: 474 FTES

97. 50% first and third quartiles together make up 50%

98. The IQR gives middle part of data. IQR 919

99. Median = .03 STDV away from mean

