

Name: _____ Date: _____ Block: _____

Measures of Central Tendency Worksheet

- 1) The heights (in inches) of eight tomato plants are:

36, 45, 52, 40, 38, 41, 50, and 48

Find the range, mean, median, and mode(s) of the tomato plant heights.

- 2) You and your friend have a friendly competition going on about the scores on your math quizzes. Both of your scores for the first five quizzes are given below.

Your quiz scores: 18, 16, 19, 15, 17

Friend's quiz scores: 20, 20, 13, 12, 17

- a) Find the mean, median, and mode of both sets of data.
- b) Do you or your friend have the higher mean? Who has the highest median?
- 3) In which dataset is the median value equal to the mean value?
a) {2, 4, 6, 7, 8} b) {12, 18, 20, 23, 24} c) {16, 17, 18, 19, 20} d) {50, 60, 65, 75, 85}
- 4) Below are percentages of all doctorates earned by men and women between 1980 and 1989.

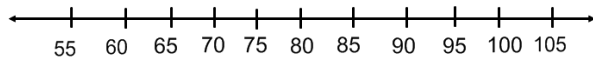
<i>College</i>	<i>Women</i>	<i>Men</i>
Boudoin	45	48
Carleton	38	61
Grinnell	34	47
Middlebury	36	46
Oberlin	20	34
Swarthmore	34	46

- a) What is the difference between the means of the percentages of doctorates earned by women and men?
- b) What is the difference in the ranges of the percentages of doctorates earned by men and women?
- c) How much higher is the median of the percentage of doctorates earned by men than the median of the percentage earned by women?

5) Suppose the students in a class received the following test scores:

85, 90, 65, 75, 90, 95, 80, 80, 70, 85, 85, 100, 60, 75, 80, 85, 90

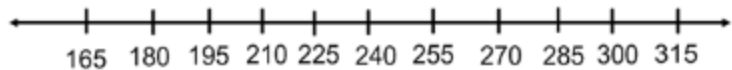
Create a box-and-whiskers plot for this data.



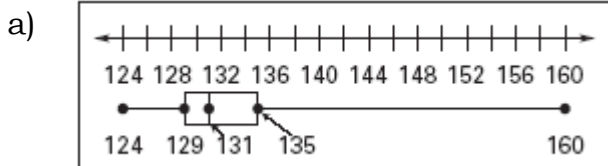
6) A research scientist recorded the following readings for an experiment she was working on.

173, 206, 179, 257, 198, 251, 239, 246, 295, 181, 261

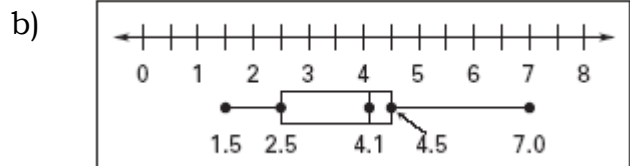
Create a box-and-whiskers plot for the data.



7) Identify the requested values by analyzing the box-and-whisker plots below.

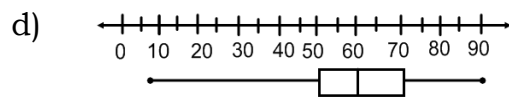
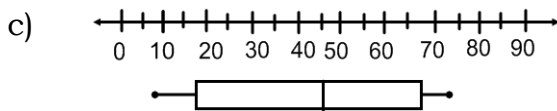
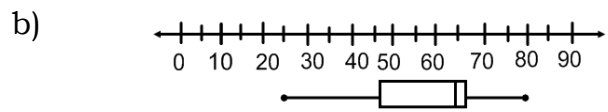
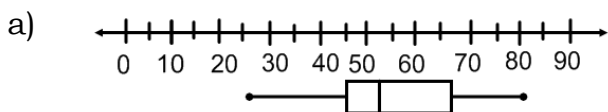


Median _____
 Upper quartile _____
 Lower quartile _____
 Lower Extreme _____ Upper Extreme _____
 Range _____ Interquartile range _____



Median _____
 Upper quartile _____
 Lower quartile _____
 Lower Extreme _____ Upper Extreme _____
 Range _____ Interquartile range _____

8) Which box-and-whiskers plot has the greatest interquartile range?



9) Using the data plotted on the scatter plot, which is the best prediction for income in the year 2000?

- a) 35,000
- b) 43,000
- c) 50,000
- d) 57,000

