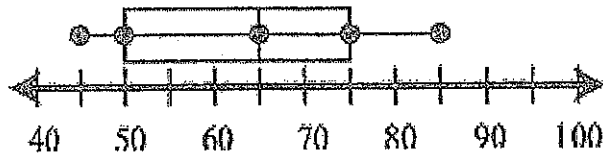
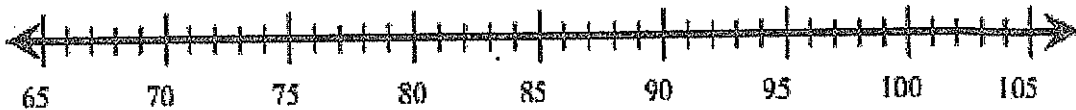


1. Which number is *closest* to the median of the data set represented by the box-and-whiskers plot below? _____

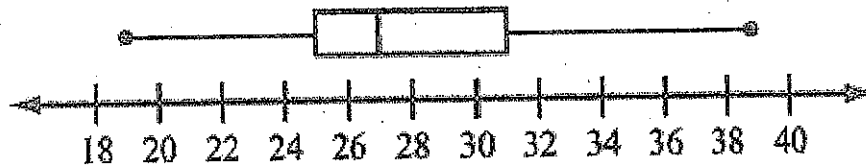


2. The following is an ordered list of monthly normal high temperatures for Phoenix, AZ.
66, 66, 70, 74, 75, 84, 88, 93, 99, 103, 103, 105

Plot a box-and-whisker plot for this data.



3. Ms. Simmons made the box-and-whisker plot below to show some statistics about the ages of the students in her class at a community college.



Ages of Students (in years)

Use this data to answer the following:

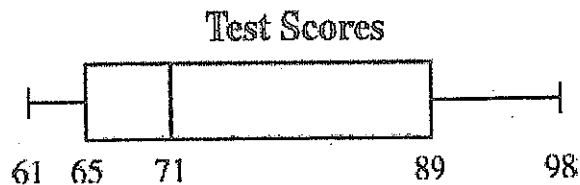
- Estimate the median for this data. _____
 - Estimate the mean for this data. _____
 - Estimate the range of this data. _____
 - Estimate the interquartile range. _____
 - What percent of Ms. Simmons students are 31 or younger? _____
 - If Ms. Simmons teaches 400 students, how many students are older than 31? _____
4. Which statistics – mean, median, mode, range – can be easily identified from a box-and-whisker plot? _____
Which statistics cannot be identified? _____
Which statistics can only be estimated? _____

5. The box-and-whisker plot shown below represents 600 scores on a district geometry test.



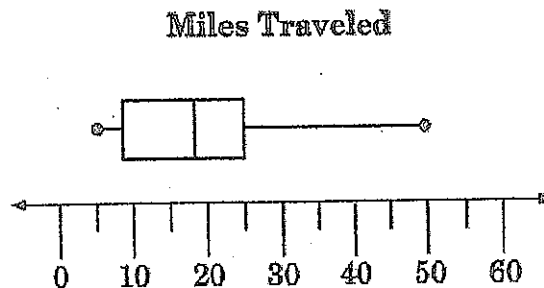
How many students scored between 42 and 56? _____

6. The box-and-whisker plot below represents the distribution of scores from a recent math test for Megan's class.



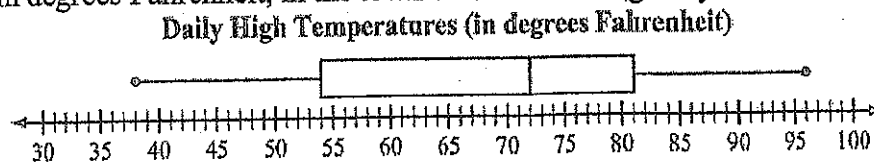
Megan's test score was in the top 25 percent of the class, but was *not* the highest score. Write a numerical score that could be Megan's score. _____

7. Mike created a box-and-whisker plot showing the miles he traveled on ten trips.



Jake also created a box-and-whisker plot of the miles he traveled on ten trips. His data set has the same median, but its interquartile range is 8. Which statement must be true?

- A. Mike's plot must have a larger box. B. Jake's plot must have a larger box.
 C. Mike's plot must have a greater range. D. Jake's plot must have a greater range.
8. The box-and-whisker plot below shows the distribution of the daily high temperatures, in degrees Fahrenheit, in the town of Clifton during the year 2004.



Based on the box-and-whisker plot, what percentage of daily high temperatures is indicated by each of the following intervals?

- a. $38^{\circ}F$ to $54^{\circ}F$ _____ b. $38^{\circ}F$ to $81^{\circ}F$ _____
 c. $54^{\circ}F$ to $72^{\circ}F$ _____ d. $54^{\circ}F$ to $81^{\circ}F$ _____

9. The Baltimore Ravens played 19 games leading up to their appearance in the XLVII Super Bowl. The table below shows the total points scored by the Ravens for each game.

Game	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Points	44	23	31	23	9	31	13	25	55	13	16	20	28	17	33	17	24	38	28

Find the following for the data.

Mean _____

Median _____

Mode _____

Range _____

Interquartile Range _____

Carmen is writing an article about the Ravens for the school newspaper. She will use one measure of central tendency from the 2012 season to describe as accurately as possible the Raven's ability to score points. Which measure of central tendency (mean, median, mode) should she use and explain your thinking? _____

10. The coach for the All-Star Basketball Game needs to pick one of two players for the team. The table below shows the number of points each of the players scored in his last 10 games.

Name of player	Number of points scored in last ten games
José	18, 32, 28, 18, 14, 28, 10, 16, 36, 20
Mario	22, 17, 23, 8, 24, 24, 22, 20, 18, 22

José

Mario

Mean _____

Median _____

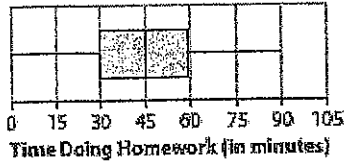
Which player would you recommend for the All-Star team? Explain your recommendation. Use the data and include a comparison of the means and medians you calculated. _____

11. Diane has taken 9 math quizzes this year. Her scores are shown below.
98, 94, 86, 88, 89, 100, 82, 91, 100

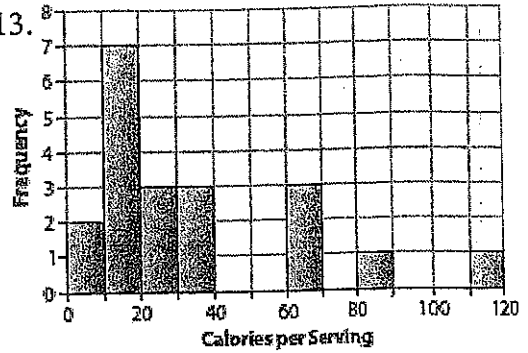
- What is the mean of Diane's quizzes? _____
- What is the mode of Diane's quizzes? _____
- Diane will take one more quiz this year. If the highest score possible on the quiz is 100, is it possible for Diane to have a quiz average (mean) of 95? Show your work or explain your answer: _____

Determine whether the following is a dot plot (line plot), histogram or a box plot (box-and-whisker plot). Find the mean or estimate the mean as closely as possible.

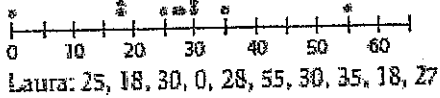
12.



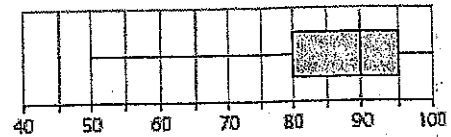
13.



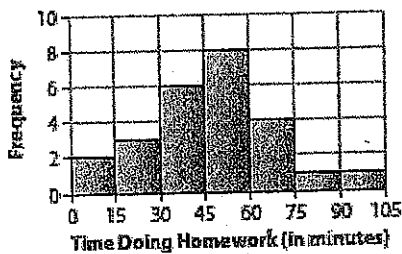
14.



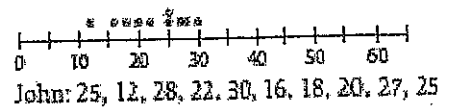
15.



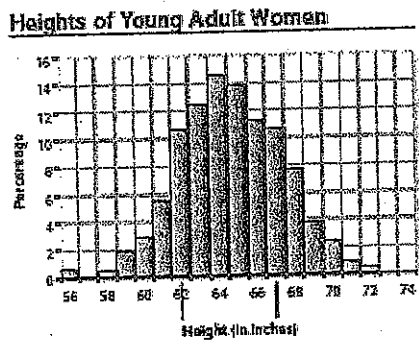
16.



17.



18.



19.

