

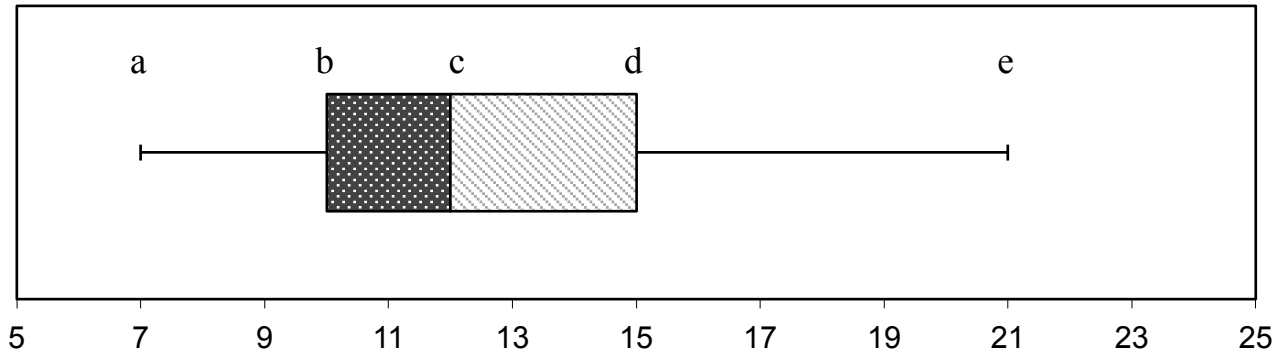
## HW 10-2

## Int 1

## Box and Whisker Plots

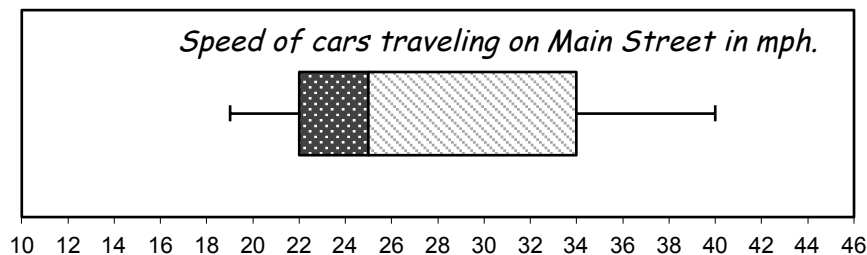
## Unit 10

Use the box-and-whisker plot below to answer the following questions.



- 1) Which letter represents the 1<sup>st</sup> quartile or 25 percentile? \_\_\_\_\_
- 2) Which letter represents the median? \_\_\_\_\_
- 3) Which letter represents the 3<sup>rd</sup> quartile or 75 percentile? \_\_\_\_\_
- 4) What percent of data is between a and b? \_\_\_\_\_
- 5) What percent of data is between b and e? \_\_\_\_\_
- 6) What percent of data is between b and d? \_\_\_\_\_
- 7) What percent of data is between c and d? \_\_\_\_\_

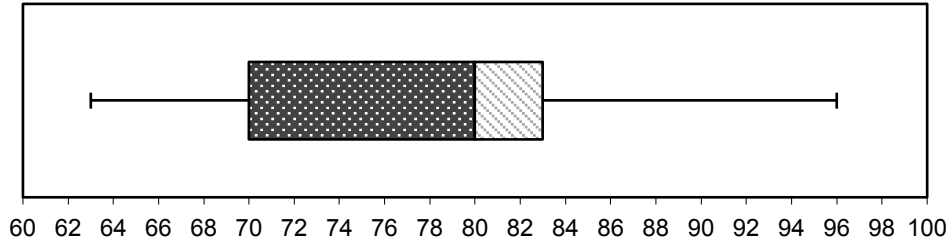
Use the box-and-whisker plot below to answer each question.



- 8) What was the speed of the fastest car on Main Street? \_\_\_\_\_
- 9) What was the median speed on Main Street? \_\_\_\_\_
- 10) What percent of cars were traveling less than 22 mph? \_\_\_\_\_
- 11) What is the 1<sup>st</sup> quartile? \_\_\_\_\_

Use the box-and-whisker plot below to answer each question.

*Test Scores*



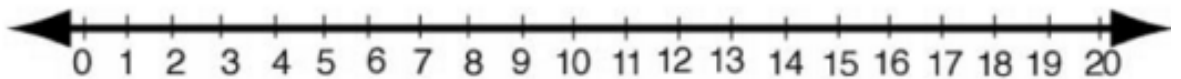
- 12) What is the range? \_\_\_\_\_
- 13) What is the interquartile range? \_\_\_\_\_
- 14) What percent of students scored between 83 and 96? \_\_\_\_\_
- 15) What was the lowest score? \_\_\_\_\_

The following is a list of popcorn kernels that did not pop in 15 bags of microwave popcorn. Use this data to fill in the missing information and to make a box-and-whisker plot.

10, 12, 9, 14, 15, 13, 12, 8, 16, 11, 10, 7, 13, 15, 14

- 16) min: \_\_\_\_\_
- 17) 1<sup>st</sup> Q: \_\_\_\_\_
- 18) Median: \_\_\_\_\_
- 19) 3<sup>rd</sup> Q: \_\_\_\_\_
- 20) max: \_\_\_\_\_
- 21) range: \_\_\_\_\_
- 22) IQR: \_\_\_\_\_

23) Plot the graph:

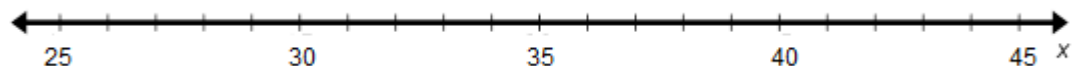


The following is a list of the number of students in each pre-algebra class at Lehi Jr. High. Use this data to fill in the missing information and to make a box-and-whisker plot.

37, 36, 29, 30, 25, 28, 35, 35, 34, 32, 30, 28, 29, 37, 38

- 24) min: \_\_\_\_\_
- 25) 1<sup>st</sup> Q: \_\_\_\_\_
- 26) Median: \_\_\_\_\_
- 27) 3<sup>rd</sup> Q: \_\_\_\_\_
- 28) max: \_\_\_\_\_
- 29) range: \_\_\_\_\_
- 30) IQR: \_\_\_\_\_

35) Plot the graph:

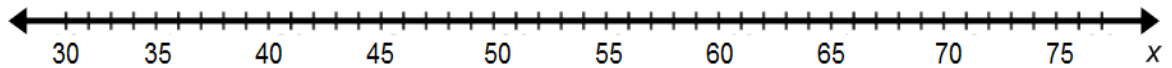


Following is a list of the high temperatures for Lehi, Utah from March 1 through March 16 in 2009 (obtained from the website [www.weather.com](http://www.weather.com)). Use this data to make a box-and-whisker plot.

- 36) min: \_\_\_\_\_  
 37) 1<sup>st</sup> Q: \_\_\_\_\_  
 38) Median: \_\_\_\_\_  
 39) 3<sup>rd</sup> Q: \_\_\_\_\_  
 40) max: \_\_\_\_\_  
 41) range: \_\_\_\_\_  
 42) IQR: \_\_\_\_\_

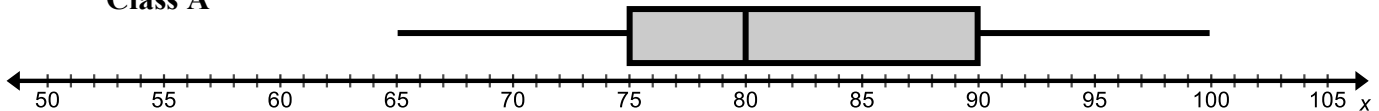
60, 58, 65, 62, 45, 42, 41, 52, 50, 38, 53, 46, 50, 57, 60, 66

43) Plot the graph:

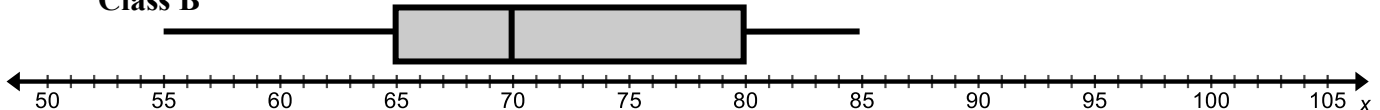


Three classes all take the same test. The next three box-and-whisker plots all are made from those classes scores. Use them to answer #44-49.

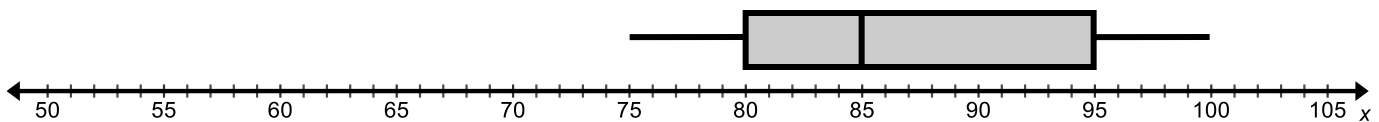
Class A



Class B



Class C



44) Which class had the largest range?

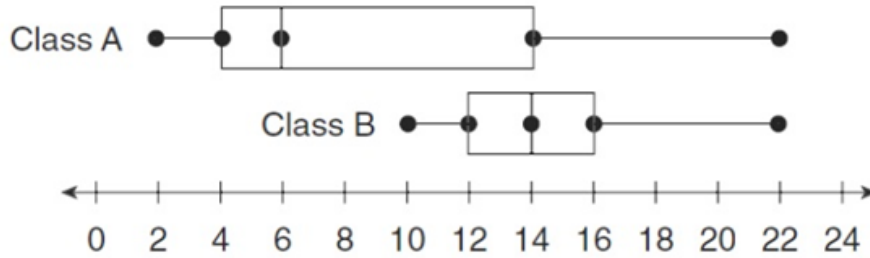
47) Which class likely had the highest average? Which class did the worst? Explain.

45) Which class had the lowest score?

46) Which class had the highest score?

48) Which class did the best? Explain.

A fitness center offers two different yoga classes. The attendee for each class for 12 sessions is represented in the box-and-whisker plot below.



49) What is the largest number of people that attended a class?

51) Which class had the lowest median of attendees?

50) Which class had the lowest attendance? What was that attendance?

52) Which class likely had the highest average of people attend?