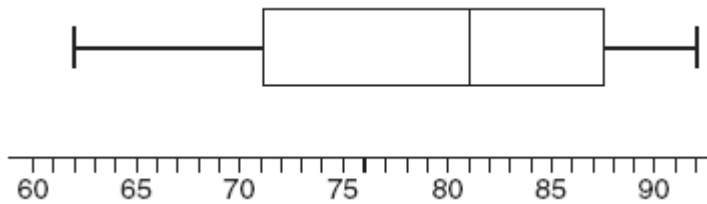


Box and Whisker Mixed Practice

Name: _____

1) The accompanying diagram shows a box-and-whisker plot of student test scores on last year's mathematics midterm examination.



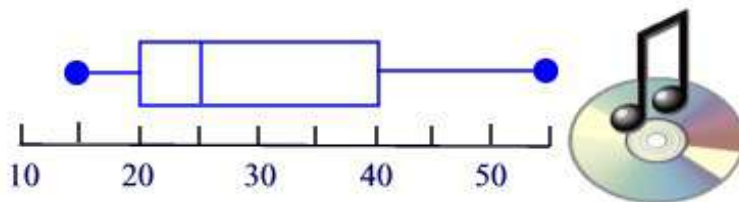
a) Find values:

all 5 statistical data summary

b) Find the interquartile range

b) Given the shape of the box and whisker plot above, would you expect the mean to be greater than, equal to, or less than the median? Explain.

2) The number of iTunes downloaded by 25 students in one week ranges from 15 to 55. The box-and-whisker plot below depicts this data. For this data



a) What is the minimum number of iTunes downloaded? What is the maximum number of iTunes downloaded?

b) What is the median of this data?

c) What is the interquartile range of this data?

d) Given the shape of the box and whisker plot above, would you expect the mean to be greater than, equal to, or less than the median? Explain.

3) The final exam test scores were:

62, 66, 71, 75, 75, 78, 81, 83, 84, 85, 85, 87, 89, 89, 91, 92, 93, 94, 95, 99.

a) Create a box and whisker plot for this data. Don't forget to put a number line under the graph and label the 5 summary values!

b) Which is greater, the median or the mean? Does this make sense given the shape of the distribution?

Let's have more fun with histograms!

4) The table shows the frequency of test scores. Make a histogram for the data set below. Then describe the shape of the distribution.

| Interval | Frequency of test scores |
|----------|-----------------------------|
| 1 – 10 | 7 |
| 11 – 20 | 11 |
| 21 – 30 | 14 |
| 31 – 40 | 6 |
| 41 – 50 | 22 |

5) The frequency table shows the distribution of weight, in pounds, of 32 students. Make a histogram for the data set below. Then describe the shape of the distribution.

| Interval | Frequency |
|----------|-----------|
| 160-179 | 9 |
| 140-159 | 8 |
| 120-139 | 6 |
| 100-119 | 2 |
| 80-99 | 7 |