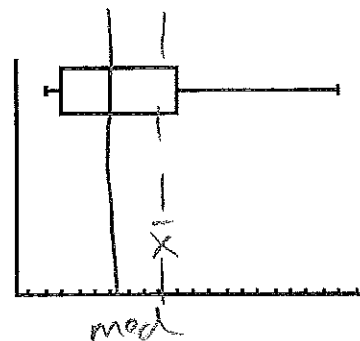


Exam Review Box Plots and Standard Deviation
Algebra 2

Name KEY 2014-15
Hour _____ Date _____

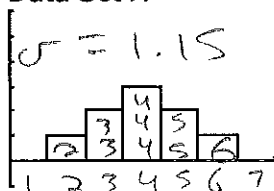
1. Use the following box plot to answer the questions below:
a. Label the mean and median on the graph.
b. What is the shape of the graph?



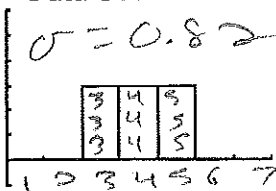
skewed right
or
positively skewed

2. Order the following from smallest to largest standard deviation:

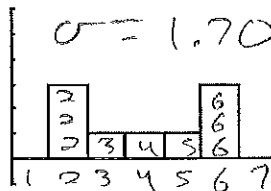
Data Set A



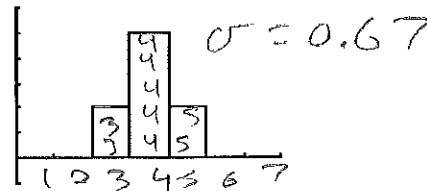
Data Set B



Data Set C



Data Set D



(Please write the letters in order from smallest to lowest)

D → B → A → C

3. The box plot below shows the ages of actresses who have received an Oscar award for their performances.

- a. At what percentile is an actress who is ²⁸2 years old?

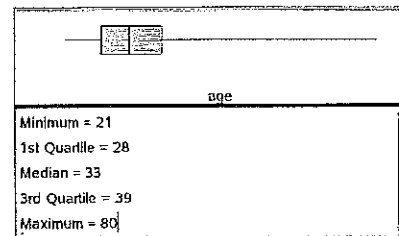
25th

- b. If an actress is at the 50th percentile ranking, what is her age?

33

- c. At what age would 75% of the actresses be at that age or below?

39



4. Use the following data to answer the questions:

3 10 12 13 15 16 16 17 18 19 19 19 20 20 25

a. What is the mean of the data set?

$$\bar{x} = 16.\bar{3}$$

b. What is the median of the data set?

$$\text{med} = 17$$

c. What is the mode of the data set?

$$\text{mode} = 19$$

d. What is the lower/1st quartile?

$$13$$

e. What is the upper/3rd quartile?

$$19$$

f. What is the standard deviation?

$$\sigma = 5$$

g. What is the range?

$$\text{Range} = 25 - 3 = 22$$

h. Create a box plot for the data.

