Alg 2 Ch 11.6-11.7 Quiz Name Key Per___

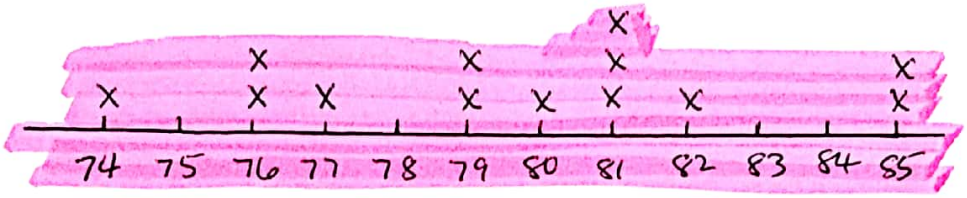
Form A Date_____ Score_____/15

For questions #1-8 use the following data:

Heights of Los Angeles Lakers basketball players (2017) measured in inches:

77 81 76 85 80 79 76 81 ~~74~~ 68 82 85 79 81

1) Make a number line plot for these data:



2

2) Make a stem and leaf plot for these data:

7	4 6 6 7 9 9
8	0 1 1 1 2 5 5

2

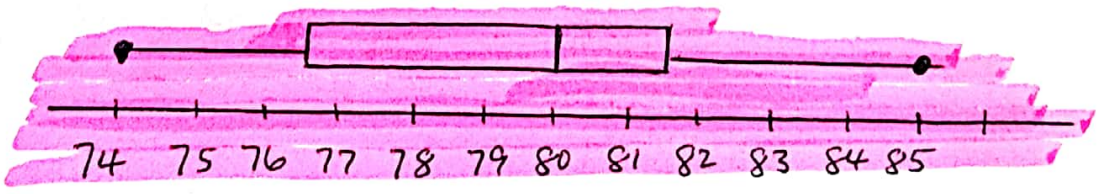
3) Calculate the following (round to one decimal place):

mean 79.7 median 80 mode 81

1 ea

Q1 76.5 Q3 81.5 range 11

4) Make a box plot for these data:



2

~more~

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For questions #1-8 use the following data: (continued)

5) Calculate the following (round to one decimal place):

standard deviation 3.2 2 variance 10.4 2

6) What height is at the 85th percentile? 82 2

$(.85)13 = 11.05$ 11th term

7) Within how many standard deviations do the heights of these players lie? 2 1

min = 74
max = 85

$\bar{x}$ =
$\bar{x} + 1\sigma$ ($\bar{x} + 2\sigma$) = 82.9, (86.1)
$\bar{x} - 1\sigma$ ($\bar{x} - 2\sigma$) = 76.5, (73.3)

8) Suppose the shortest player was actually 68 inches tall. Would this change most affect the mean, the median, or the mode?

mean 1

$\bar{x}_{74} = 79.7$ $\bar{x}_{68} = 79.2$

In general ...

9) What is the relationship between the variance and the standard deviation?

variance = (stand. dev)^2 2

10) What percentile value is associated with the lower quartile (Q1)? 25th 2

11) What percent of data lie within 1 standard deviation of the mean? 68% 1

~end~

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