

Instructions: Show all work to receive full credit. You should note any formulas used or calculator functions used, their inputs and outputs. I cannot grade work if I don't know where an answer came from. Be sure complete all parts of each questions, including requests for interpretation and explanations. Be as thorough as possible.

1. Use the information in the dataset shown to answer the following questions.

Name	Reading Score
Aaron A.	402
Abby	451
Adam D.	407
Adrian F.	422
Alaina	379
Alexander I.	443
Alexandrea	414

- a. Find the mean, median and mode (if it exists) of the data.

\bar{X} (mean) = 416.86

median = 414

\bar{X}

no mode

- b. Find the standard deviation of the data.

$S_x = 24.613$

2. Find the five-number summary of the data shown in the table below, and use that information to create a boxplot.

66	68	68	75	75	76	76	79	80	81
81	83	83	85	85	85	87	88	92	93

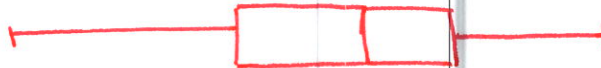
min: 66

Q_1 : 75.6

med: 81

Q_3 : 85

max: 93



3. What percentile does the median (of any dataset) represent?

50th percentile