

Getting Ready for the Midterm – Chapter 3

Topics

You are responsible for the following:

- Calculate the mean, median, or mode by hand or StatCrunch.
- Calculate range, standard deviation, or variance by hand or StatCrunch.
- Calculate quartiles and the interquartile range by hand or StatCrunch.
- Determine if a value is an outlier.
- Create a boxplot by hand or StatCrunch.

Practice Problems

Central Tendency Calculations

1) Calculate mean, median, Q1, Q3, and mode for this set of data.

Daily volumes of the New York Stock Exchange for August 1999 (millions of shares)

649	739	789	859	699	684	836	793
745	692	583	691	683	684	661	682
732	864	719	569	605	860		

Dispersion Calculations

2) Here are the scores of 8 randomly selected students on a math exam. Find the standard deviation, variance, and range for these scores.

62	75	72	95	82	86	80	71
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Fences, Outliers, and Boxplots

3) Here are the ages of the 16 full-time faculty members in the Math Department at a community college. Compute the lower fence and upper fence. Are there any outliers? Create a boxplot for the data.

27	42	40	59	32	28	29	30
32	45	27	44	37	52	54	26