

Homework Solutions

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Exercise 11

- (a) Use the TI-83. Enter the data into a list and use `1-Var-Stats` to get s . We get
- (i) $s = 9.016$.
 - (ii) $s = 0$.
 - (iii) $s = 2.669$.
- (b) The standard deviation for data set (i) is so large because of the outlier 27. It has a very large deviation which was averaged in with the rest, increasing the size of the standard deviation.
- (c) The ranges are
- (i) $\text{Range} = 27 - 1 = 26$.
 - (ii) $\text{Range} = 7 - 7 = 0$.
 - (iii) $\text{Range} = 11 - 3 = 8$.

The range is misleading for data set (i). Except for the 27, there data are tightly clustered.