

CHAPTER 20 - BOXPLOTS

TI-84 Plus

Consider the data set 3, 5, 5, 7, 10, 9, 4, 7, 8, 6, 6, 5, 8, 6.

Enter the data into **List 1**. To obtain descriptive statistics of the data set, press **[STAT]** **[▶]** **1:1-Var Stats** **[2nd]** **1** (**L1**) **[ENTER]**.

So, the 5-number summary is


$$\begin{cases} \text{minimum} = 3 & Q_1 = 5 \\ \text{median} = 6 & Q_3 = 8 \\ \text{maximum} = 10 \end{cases}$$

To obtain a boxplot of the data, press **[2nd]** **[Y=]** (**STAT PLOT**) **1** and set up **Plot1** as shown. Press **[ZOOM]** **9:ZoomStat** to graph the boxplot with an appropriate window.

The range = $10 - 3 = 7$, and the IQR = $8 - 5 = 3$.

1-Var Stats L1

1-Var Stats
n=14
minX=3
Q1=5
Med=6
Q3=8
maxX=10

Plot1 Plot2 Plot3
On Off
Type: L1 L2 L3
Xlist: L1
Freq: 1
Mark:  + .

