

MDM4U – Quiz – One Variable Statistics

1. Given the following data:

12 45 67 34 56 89 108 23 78 79 56 87 99 11 50 61 54 89

a) Calculate the mean and mode [4]

b) Draw a box-plot and use the 1.5 IQR to test for outliers. [10]

2. A group of people have their heights given in cm:

Laura 183                  Jamie 165                  Deepa 148                  Colleen 146

Ingrid 181                  Justiss 178                  Sheila 154

a) Calculate the variance and the standard deviation. [5]

b) Calculate the z-score for Sheila's height. [2]

3. The time taken to complete a chess game was recorded to the nearest minute. The frequency table shows the data.

<b>Time (min)</b>	10-14	15-19	20-24	25-29	30-34
<b>Frequency</b>	2	20	18	10	5

Calculate the estimated mean, median and mode times, in minutes, to complete a chess game. [5]

4. Helena got 89% on her term work in English and 72% on the final exam. What will her final grade be if the term mark counts for 70% and the final exam counts for 30%? [3]

5. What does it mean to have a z-score of 1? [1]