1D – Dot Plots & Stem Plots

**DISPLAYING DISCRETE NUMERICAL DATA USING A DOT PLOT**

Construct a **dot plot** for the following data:

*The age of 13 cricket players in a team is recorded below:*

22 19 18 19 23 25 22 29 18 22 23 24 22

*NOTE: There is a Mathematica command for checking your dot plot in the Chapter 1 notebook*

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**IDENTIFYING THE MODE**

The mode is the **most frequently occurring number** (age) in the data.

*In the above data set, the mode is \_\_\_\_ years*.

**IDENTIFYING ANY POTENTIAL OUTLIERS**

The player aged \_\_\_\_ years seems to be \_\_\_\_\_\_\_\_\_\_ in comparison to the rest of the data. A test is needed to determine whether this value is an outlier.

**ANALYASIS QUESTIONS**

*What percentage of cricketers are less than 22 years old?*

*Which ages are in the top 39% of the data?*

1D – Dot Plots & Stem Plots

**DISPLAYING DISCRETE NUMERICAL DATA USING A STEM PLOT**

Construct an un-ordered stem plot followed by an ordered stem plot for the following data. Use stem intervals of 2 with a start value of 0. Include a key.

*The marks obtained by 17 VCE students on a statistics test are recorded below:*

2 12 13 9 18 17 7 16 12 10 16 14 11 15 16 15 17

*NOTE: There is a Mathematica command for checking your stem plot in the Chapter 1 notebook*

Un-ordered Stem Plot Ordered Stem Plot

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**DESCRIBING THE SHAPE AND POTENTIAL OUTLIERS**

The shape of the distribution is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

The test mark of \_\_\_\_ seems to be \_\_\_\_\_\_\_\_\_\_ in comparison to the rest of the data. A mathematical test is needed to determine whether this value is an outlier.

**ANALYSIS QUESTION**

1. *What percentage of the test marks are in between 12 and 15 (inclusive)?*