2AB Mean Median Mode

1. The mean of a sample of 25 observations is 6.4. The mean of a second sample of 30 observations is 7.2. Calculate the mean of all 55 observations.

2. The mean of a sample of 25 observations is 6.4. The mean of a second sample of 30 observations of 7.2. Calculate the mean of all 55 observations.

3. Rebecca records the shirt collar size, x, of the male students in her year. The results are shown in the table.

For the data, calculate:

a) The mode

Collar Size	Number of Students
15	3
15.5	17
16	29
16.5	34
17	12

b) The median

c) The mean

d) Explain why a shirt manufacturer might use the mode for setting their production quota

4. The length, x mm, to the nearest mm, of a random sample of pine cones is measured. The data is shown in the table to the right.

a) Write down the modal class

Cone length (mm)	Frequency
30-31	2
32-33	25
34-36	30
37-39	13

b) Estimate the mean

c) Find the median class