Calculating the mean and standard deviation on a calculator

The following commands show how to calculate the mean and standard deviation by using the STAT mode on a CASIO *fx*-83 GT PLUS (the procedure is similar for other CASIO models).

① **Enter the data**

- Press Mode (top right corner);
- then press 2 for STAT mode;
- then press 1 corresponding to the 1-Var option.

This should bring up a table with one column headed x and the numbers 1,2,3 down the left-hand side. To enter each data point, input its value followed by the $=$ sign. For example, if the data are

$$16, 52, 0, 6, 10, 0, 21$$

enter:

- 16 $=$ 52 $=$ 0 $=$ 6 $=$ 10 $=$ 0 $=$ 21
- To finish entering the data press the AC button.

② **Calculating numerical summaries**

- Press SHIFT followed by 1 to select STAT mode;
- then select the Var option which is number 4 on the *fx*-83 GT PLUS but number 5 on some older models;
- there should be four options; 1 is the sample size n; 2 is the sample mean $\bar{x}$; and 4 is the sample standard deviation s;
- for example, press 4 (corresponding to sx for the sample standard deviation), then press $=$ to get the answer.

Note that you need to repeat the process under ② for each numerical summary.

You should get 15 for the mean, and 18.083 (to three decimal places) for the standard deviation; these match up with what we calculated in Examples 1 and 5 in Chapter 3.