Assume we are modelling a normal distribution of exam scores with a mean of 60 and a standard deviation of 12.
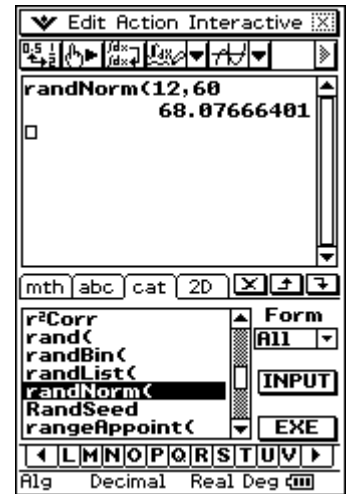
Start in Main and check the settings at the bottom of the screen.

Open the keyboard and tap on the **cat** tab.

Navigate to the functions starting with R, highlight **randNorm** and tap **INPUT**.

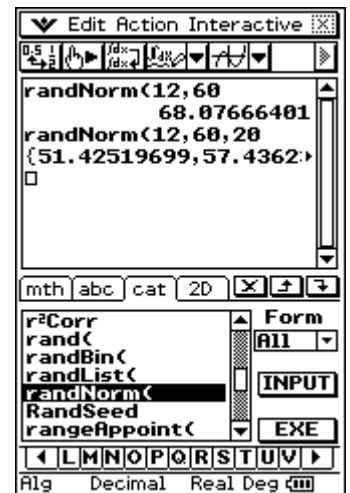Enter the population standard deviation of 12 and mean of 60. Tap **EXE**.

A single random sample is generated from the distribution.

Copy the previous entry to a new line and add a third parameter – the number of samples required, such as 20.

Tap **EXE**.

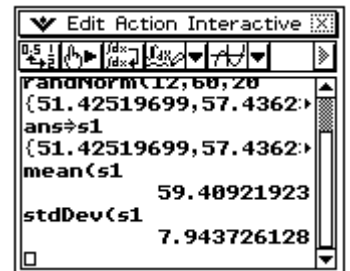20 random samples are generated from the distribution and returned in a list.

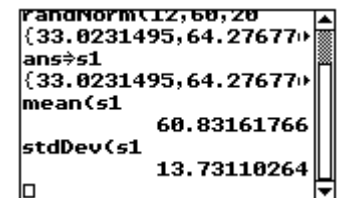Store the list of 20 numbers into a variable called $s1$ for analysis. Use the **mth** and **abc** tabs.

Tap **Action, List-Calculation, mean**.

Add *s1* and tap **EXE**.

In the same way, calculate the standard deviation of the sample.

randNorm(12,60,20
{51.42519699,57.4362»
ans⇒s1
{51.42519699,57.4362»
mean(s1
                 59.40921923
stdDev(s1
                 7.943726128

Tap back onto the second line and tap **EXE** to draw another random sample of 20.

randNorm(12,60,20
{33.0231495,64.27677»
ans⇒s1
{33.0231495,64.27677»
mean(s1
                 60.83161766
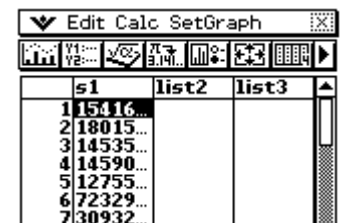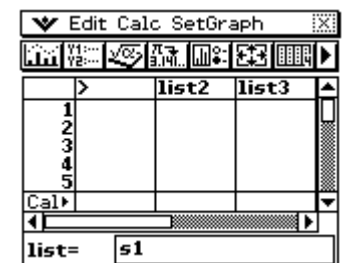stdDev(s1
                 13.73110264

The sample can also be analysed in the Statistics application.

In Stats, tap **Edit, Clear All**.

Tap onto **list1** and use the **abc** tab on the keyboard to enter *s1*.

Tap **EXE**.

The sample appears (in fractional form) with *s1* as the list heading.

Remember when calculating One-Variable statistics or graphing to set the **XList** to **main/s1**.