Classpad Help Series sponsored by Casio Education Australiawww.casioed.net.au082Random Sample From NormalAuthorCharlie WatsonDistributionDate31 January 2010CPM OS03.04.4000

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.

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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.

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

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**.

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