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085	Random Sample From Binomial Distribution	Author	Charlie Watson
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		CPM OS	**03.04.4000**

Assume we are modelling a binomial distribution with $n = 24$ and $p = \frac{1}{6}$.

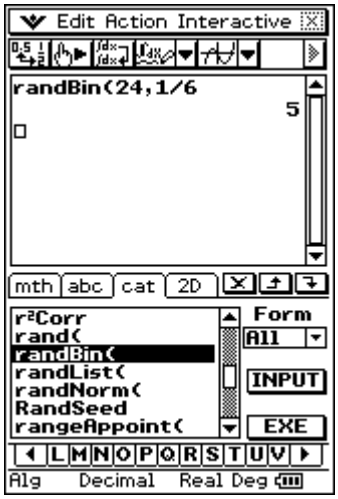
Start in Main and check the settings at the bottom of the screen.

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

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

Enter the number of trials and probability of success. Tap **EXE**.

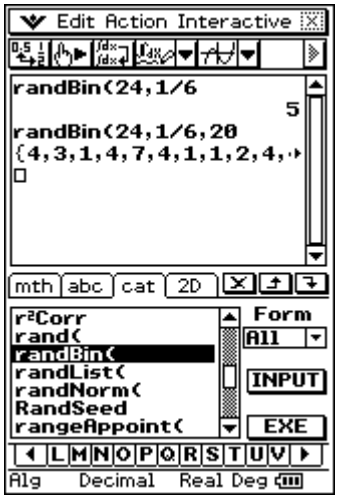
A single random sample is generated from the distribution.



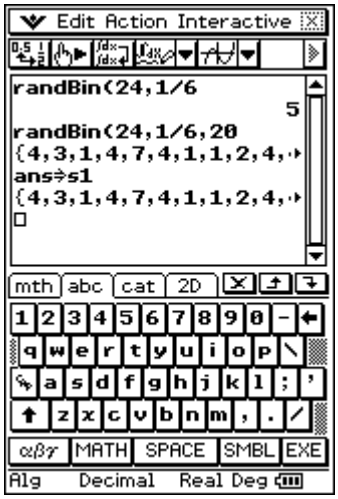
Copy the previous entry to a new line and add a third parameter – the number of samples required, such as 20.

Tap **EXE**.

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



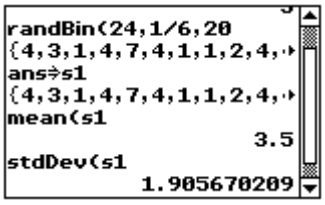
Store the list of 20 numbers into a variable called *s1* for analysis. Use the **mth** and **abc** tabs.



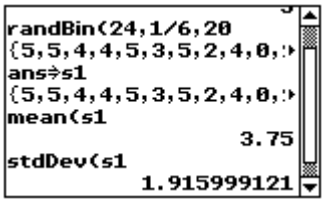
Tap **Action, List-Calculation, mean**.

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

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



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



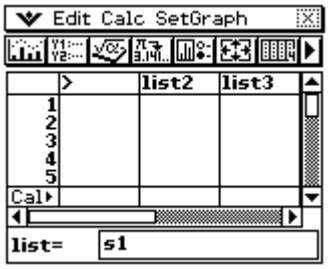
The sample can also be analysed in the Statistics application.

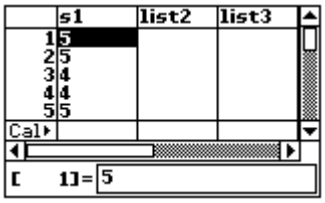
In Stats, tap **Edit, Clear All**.

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

Tap **EXE**.

The sample appears with *s1* as the list heading.





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