This activity assumes that you already know the setup steps to create a histogram as explained in the Basic level Help Sheet 406.

We will use the randList function to create a list of 100 random numbers between 1 and 20 and examine their distribution using a histogram.

Open the Statistics application.

Edit Calc SetGraph .

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Tap Edit, Clear All.

Open the keyboard.

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Tap into the **Cal** box at the bottom of the list1.

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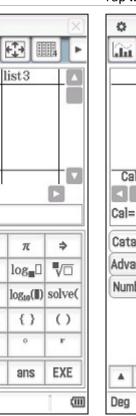
tan

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list2

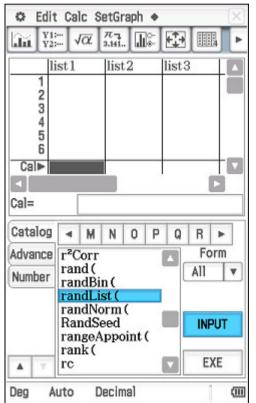
Tap to reach the Catalog, find and select the **randList(** function.

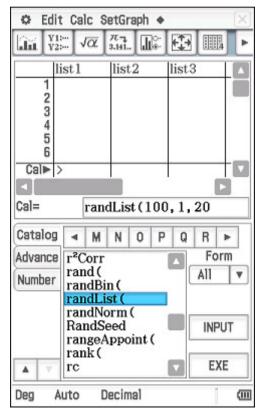
Tap **INPUT.**



Type 100, 1, 20 and a closing bracket, to generate a list of 100 random integers between 1 and 20.

Тар **ЕХЕ**.







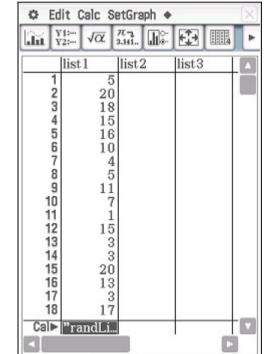
Edit the SetGraph settings as shown for a histogram.

Tap and accept the default Set Interval values by tapping **OK**.

Tap to display the histogram in a single window.

Tap and use the cursor keys to trace along the tops of the columns, observing the lower class boundary (xc) and class frequency (Fc) displayed at the bottom of the screen.

Tap and the Set Interval input box is displayed. Modify the values so that HStart is 0.5 and HStep is 2. Tap **OK** and again trace along the columns. The first class is now 0.5 - 2.5, the second 2.5 - 4.5 and so on. Classpad would include a score of exactly 2.5 in the second class and so we could write the class intervals more formally as $0.5 \le x < 2.5$, etc.



randList(100, 1, 20

(111)

Decimal

Cal=

Deg

Auto

Notice that list1 now contains 100

random numbers from 1 to 20.

