

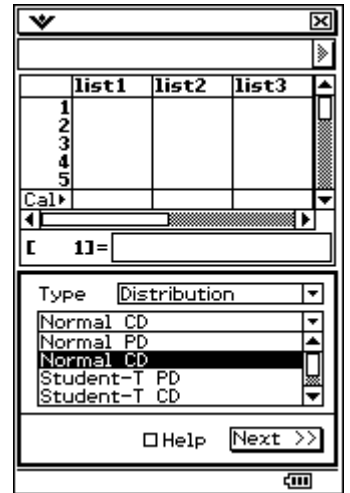
We will calculate normal probabilities in the Statistics application.

Assume we are working with a normal population of weights with mean 65kg and standard deviation of 12kg.

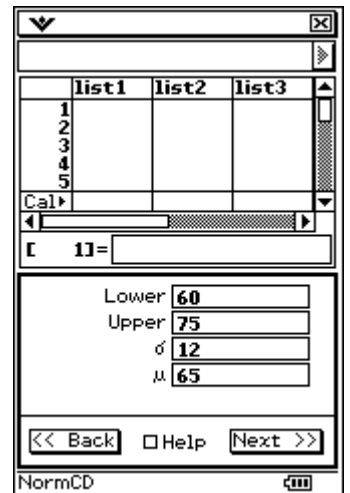
What is the  $P(60 \leq x \leq 75)$ ?

Tap **Calc, Distribution** and then choose **Normal CD** from the lower drop down menu.

Tap .

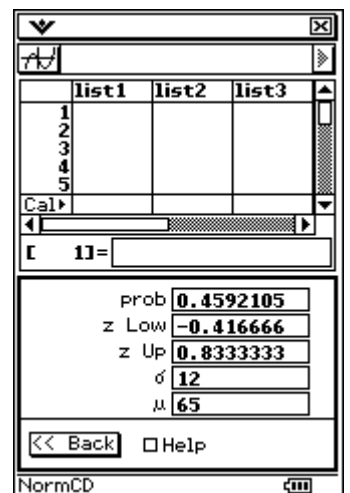



Enter the four required values as shown and then tap .



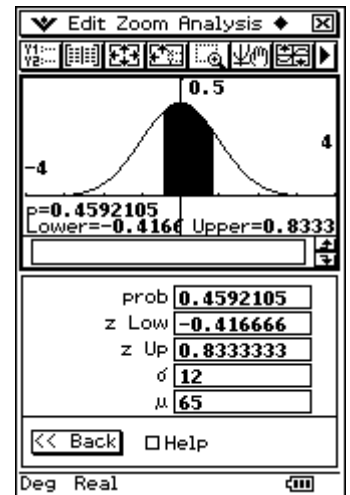
The probability is just under 0.46.

The standard scores corresponding to the lower and upper values of 60 and 75 are also displayed as -0.417 and 0.833 respectively.



Tap on the graph  icon in the top left corner of the screen.

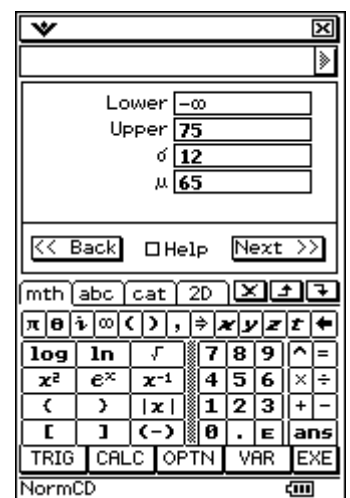
The black area represents the calculated normal probability.



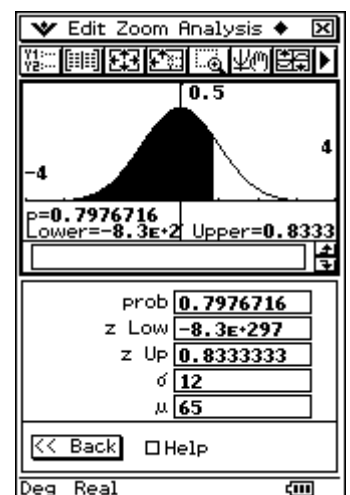
Now close all windows and return to the lists.

What is  $P(x \leq 75)$  ?

Repeat the previous steps. When entering the lower value use negative infinity – the  $\infty$  symbol from the **mth** tab.



The resulting area and probability of 0.798 are shown.



Normal probabilities can be calculated in the Main application and also using the normCDF function in a solve strip within an eActivity.

These are explained in other help sheets. Please refer to the menu.