

Classpad Help Series sponsored by Casio Education Australia		www.casioed.net.au	
080	Normal Probability Calculations	Author	Charlie Watson
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		CPM OS	03.04.4000

We will calculate normal probabilities in the Main application.

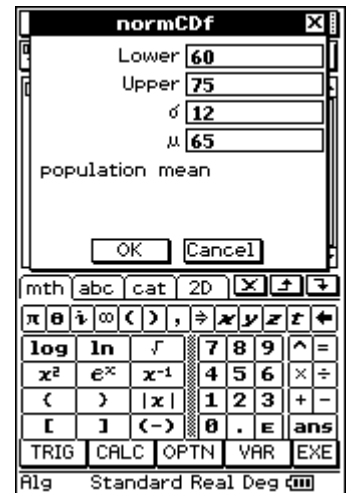
Note that the technique shown here is only possible using OS v3.04 and later.

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 **Interactive, Distribution, normCDF**.

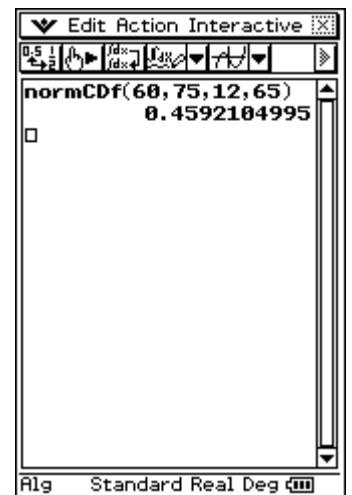
Enter the four required values as shown and then tap **OK**.



The probability is just under 0.46.

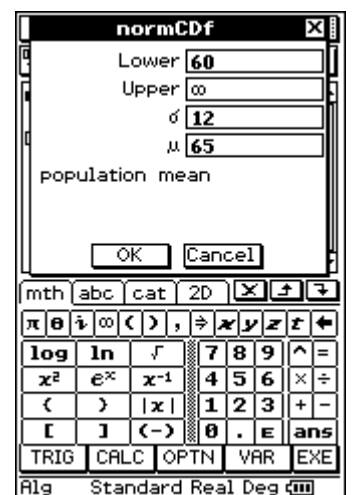
If you prefer the Action menu, the order of variables can be seen from the expression that Classpad returns:

normCDF(Lower, Upper, SD, Mean)



What is the $P(x \geq 60)$?

Repeat the previous steps. When entering the upper value use positive infinity – the ∞ symbol from the **math** tab.

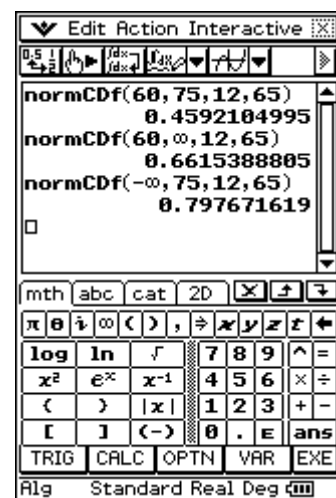


The probability is just over 0.66.



Check that you agree with the result shown for the $P(x \leq 75)$.

Hint: Enter $-\infty$ for the lower value.



Normal probabilities can also be calculated in the Stats 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.