

Classpad Help Series sponsored by Casio Education Australia		www.casioed.net.au	
675	Normal Probabilities Using Solve	Author	Charlie Watson
		Date	31 January 2010
		CPM OS	03.04.4000

Start in eActivity.

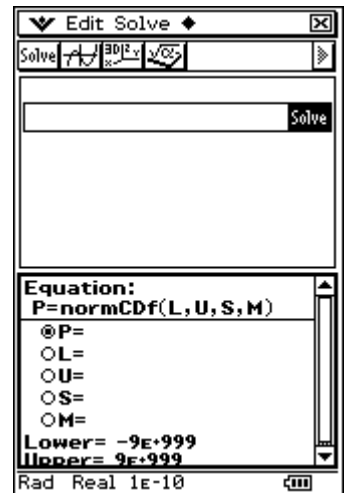
This eActivity contains a NumSolve strip which can be used to calculate any of the parameters involved in a normal probability question.

Tap **Insert, Strip, NumSolve**.

Enter the equation shown.

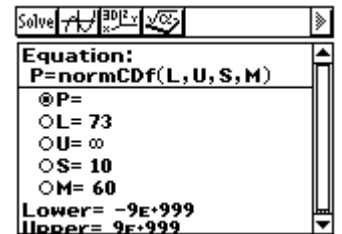
Working with the normCDF function in this way allows the user to solve for any of the 5 variables involved.

Note that a sensible first approximation will often be necessary to find a solution in this way.

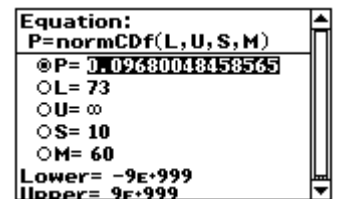


Example 1. If $X \sim N(60,10)$ determine $P(X > 73)$.

Enter the required parameters and select the button next to **P**.

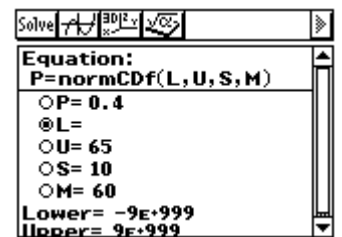


Tap **solve**.

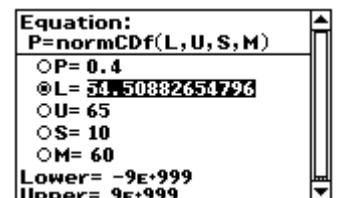


Example 2. If $X \sim N(60,10)$ and $P(a < X < 65) = 0.4$, find a .

Enter the required parameters and select the button next to **L**.



Tap **solve**.

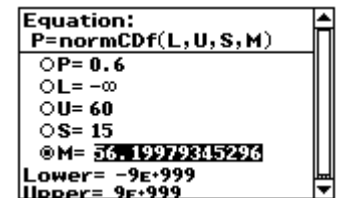
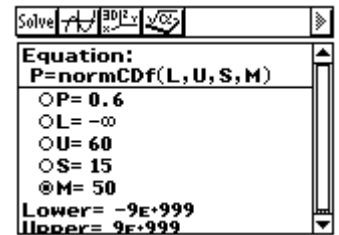


Example 3. If $X \sim N(m,15)$ and $P(X < 60) = 0.6$, find m .

Enter the required parameters.

Select the button next to **M** and enter an approximate estimate of $M = 50$.

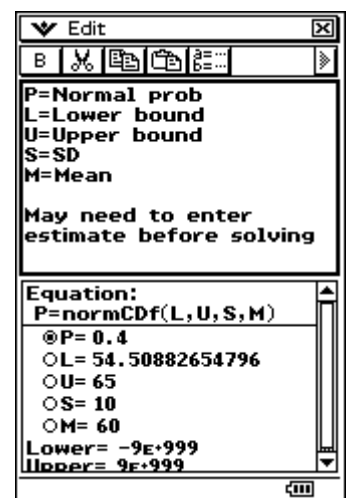
Tap **solve**.



An optional step is to add strip help.

Close the NumSolve strip and tap **Insert, AddStrip Help**.

Some suggested text is shown at right.



Close the strip, enter a suitable title for it and save the eActivity.

