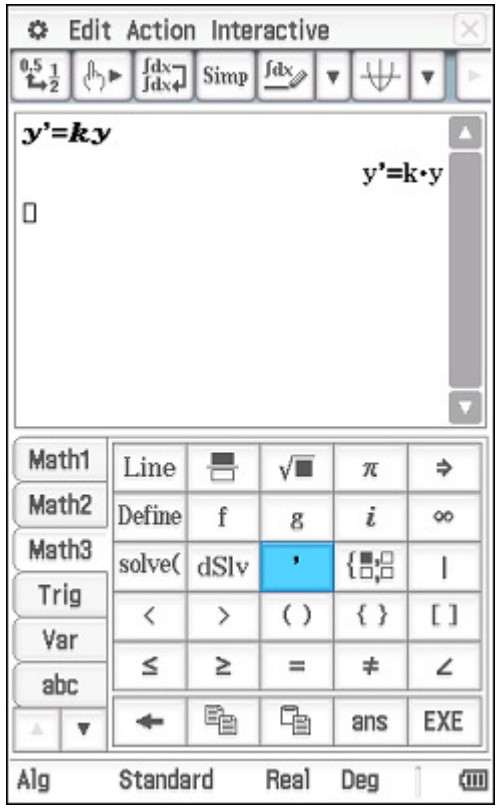
ClassPad II Help Series	Casio Education Australia - supporting Australian teachers	www.casio.edu.shriro.com.au	Author	Charlie Watson
CP270	Use Of dSolve In Growth And Decay Problems		Date	April 2015
			CPII OS	02.00.2000.0000

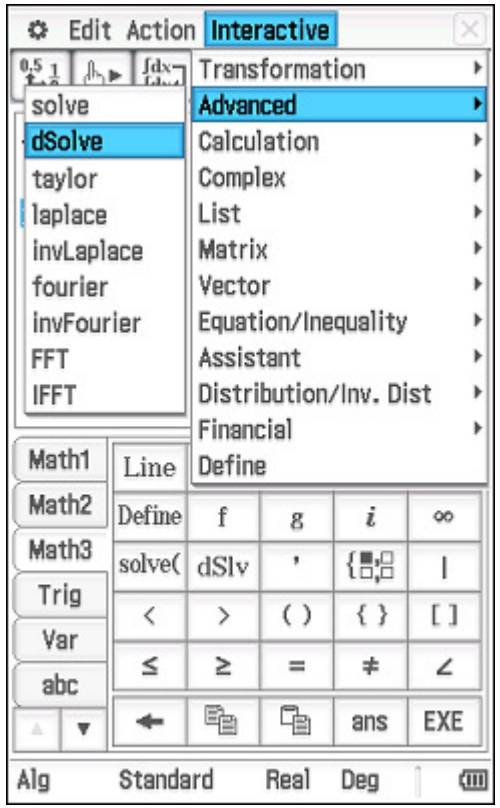
The number of people, *y*, is such that $y' = ky$. Originally there were 420 people. 2 weeks later this number had increased to 500.

Determine *k*.

Enter the equation $y' = ky$ using the Math3 keyboard.

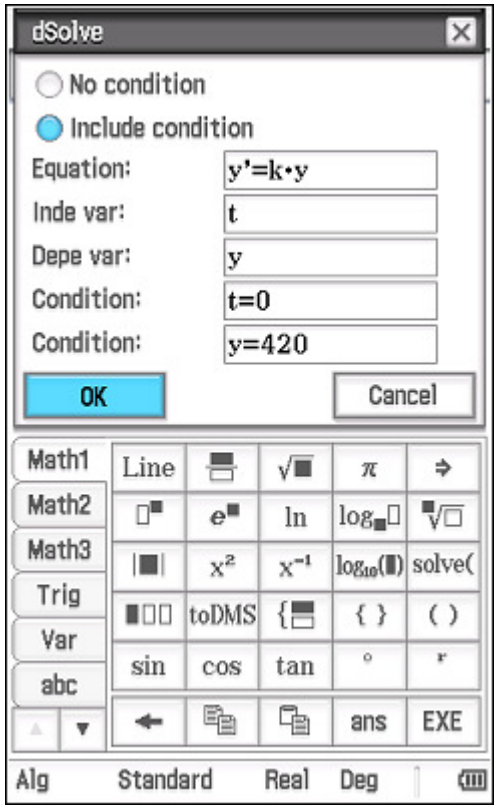


Select the equation and tap **Interactive, Advanced, dSolve**.



Tap **Include condition**.

Enter the data and tap **OK**.

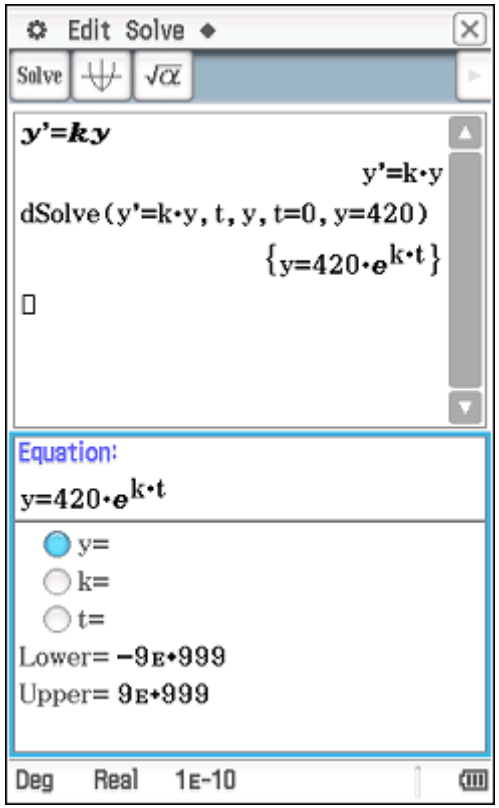


A solution is returned.

Open **NumSolve** in the bottom half of the screen.

Drag the solution into the equation entry area.

Tap **EXE**.



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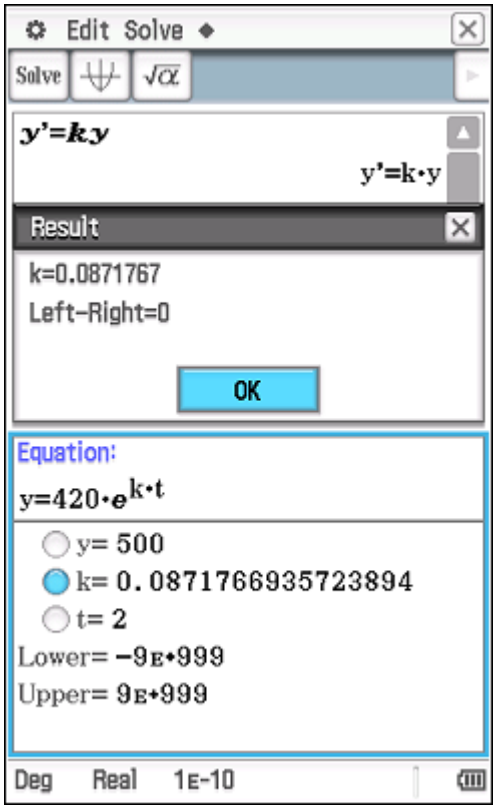
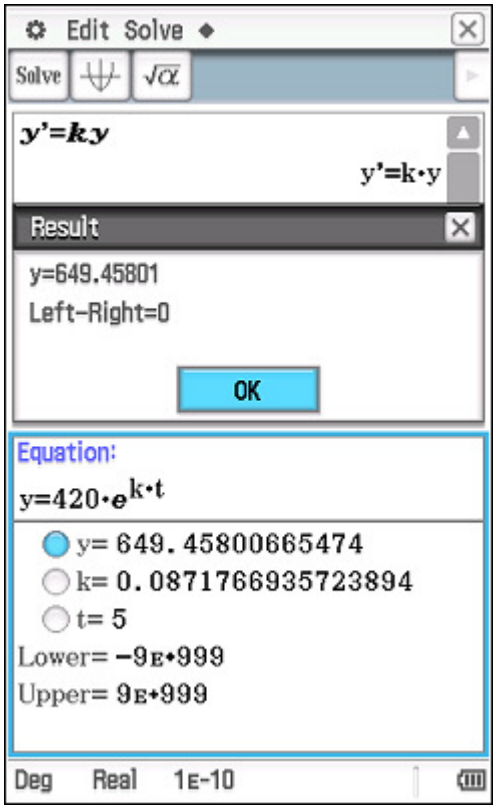
Enter the values $y = 500$ when $t = 2$ and solve for *k*.



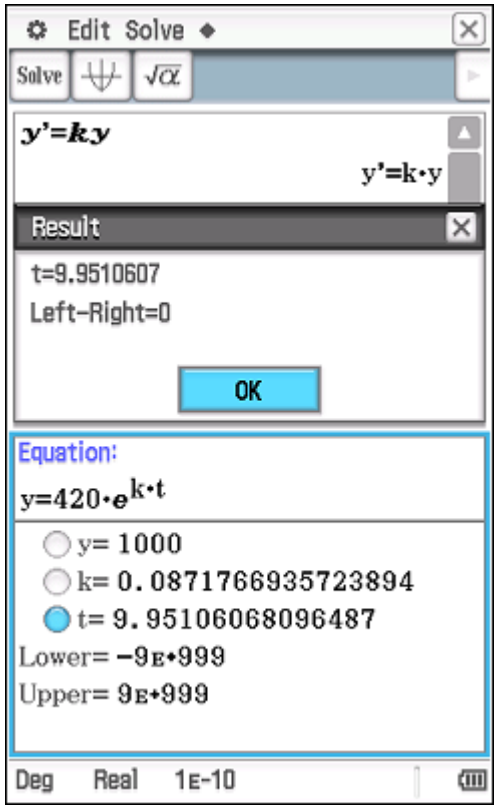
How many people are expected to have the illness after 5 weeks?

Change $t = 5$ and solve for *y*.



How long until 1000 people have the illness?

Change $y = 1000$ and solve for *t*.



Close NumSolve and tap **Edit**, **Clear All Variables** in Main.

(This clears the values assigned to the variables y, k and t in NumSolve.)