

Solving Simultaneous Equations.

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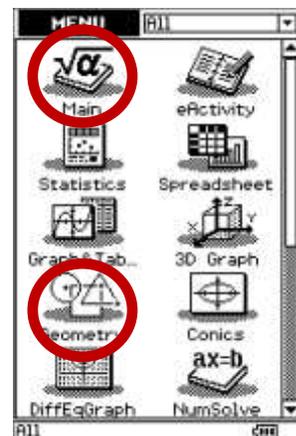
Simultaneous equations are a set of equations which have more than one variable has to be found.

Example: 1 000 tickets were sold to a school production. Adult tickets cost \$8.50, student tickets cost \$4.50, and a total of \$7 300 was collected. How many tickets of each kind were sold?

Solution: Let x be the *number of adult tickets*. Let y be the *number of children's tickets*.

$$\begin{aligned} \text{Total tickets sold:} & \quad x + y = 1\,000 \\ \text{Funds raised:} & \quad 8.5x + 4.5y = 7\,300 \end{aligned}$$

Open the main icon:
Then bring up the soft Keyboard.



Enter the equations:



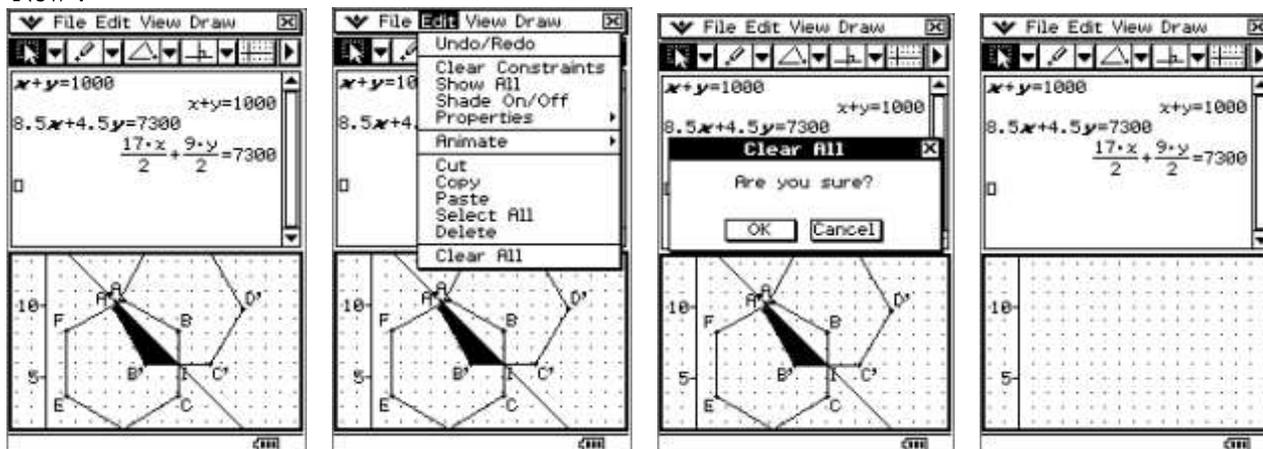
Now, tap in the **Geometry** dropdown icon (within the icon). Clear the **Geometry** window if you have items in or select new.

Soft Keyboard

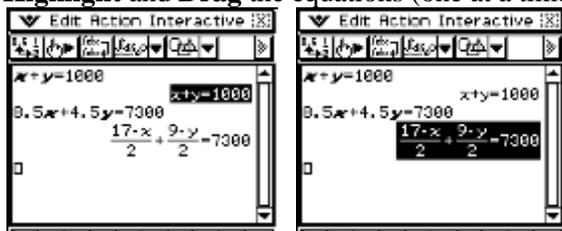


Main here

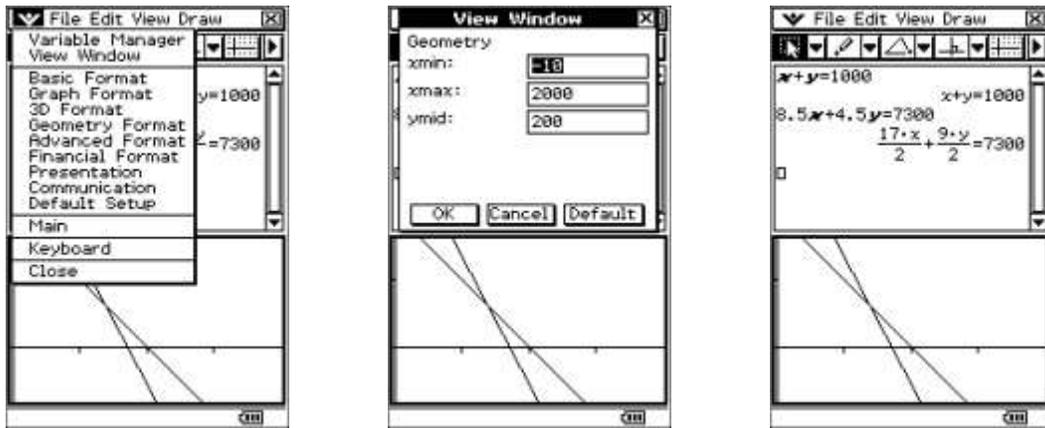
Clear the **Geometry** window if you have items in there by selecting 'Edit' then 'Clear All' or select 'File' then 'New'.



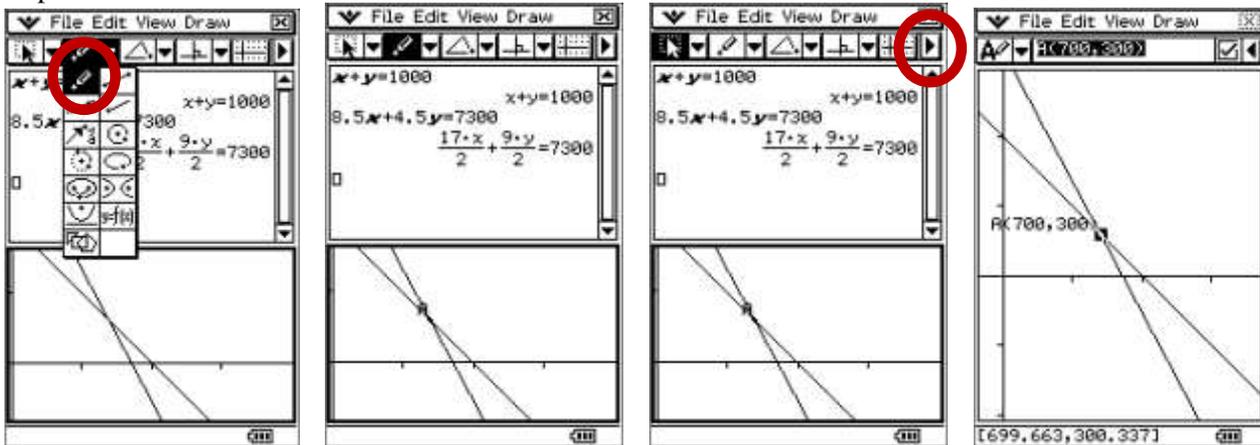
Highlight and Drag the equations (one at a time) you have entered in **Main** window into the **Geometry** window.



Tap in the **Geometry** window then select the 'View Window' and change to a suitable setting then click on 'OK'.



Select the drawing icon for a point, the tap on the intersection of the two lines. Select the page 2 arrow ►, now tap on point A.



Solution $x = 700$ adults and $y = 300$ students.

Alternatively:

In the **Main** window, select the soft Keyboard, then the **2D** folder and select the icon for simultaneous equations. Simultaneous equations symbol: 

Type in each equation $x + y = 1000$ and $8.5x + 4.5y = 7300$ (as shown below) and place x, y in the box to the right, then press **EXE**.

