

Solving Simultaneous Linear Equations – Interactive step by step method

Solve simultaneously :

$$\begin{aligned} 2x - 3y &= -1 && \textcircled{1} \\ x + y &= 7 && \textcircled{2} \end{aligned}$$

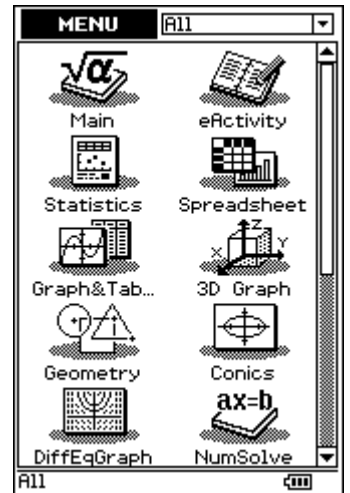
These can be solved algebraically in two main ways:

- Interactively step by step in the main screen
- Using the Solve command from the embedded screen menus.

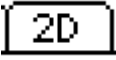
This task uses the first option.



Tap the Main screen icon



Press **Keyboard**


Tap 

To solve interactively ...

We can consider multiplying equation $\textcircled{2}$ by 3 and ADDING this to equation $\textcircled{1}$


Tap **Action, Transformation, simplify**

Enter and then highlight equation $\textcircled{2}$

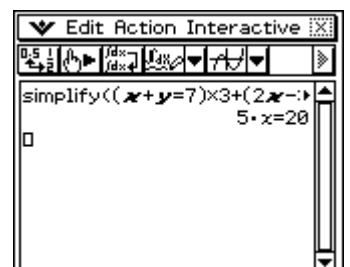
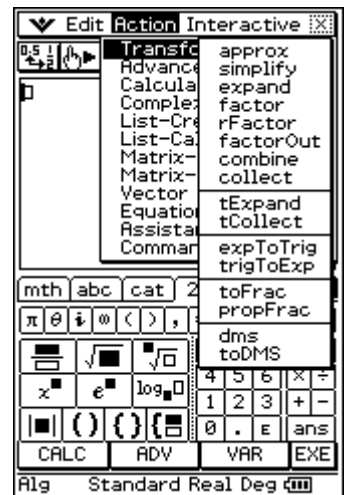
Tap 

Position the cursor after the right bracket
Type **x 3 +**

Enter and highlight equation $\textcircled{1}$

Tap 

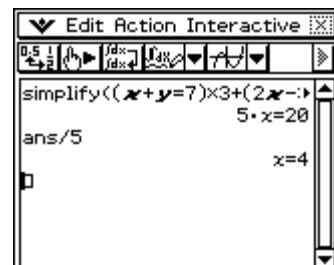
Press or tap **EXE**



To solve $5x = 20$:

Type $\div 5$

Press or tap **EXE**



To substitute $x = 4$ in equation ② and solve for y :

Highlight the equation $x + y = 7$ and drag to the new line

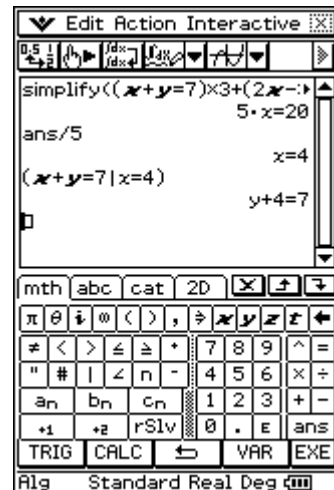
Highlight $x + y = 7$

Tap **math**, tap **OPTN**, tap **|**

Highlight $x = 4$ and drag to the cursor

Highlight the entire line, $x + y = 7 | x = 4$

Tap **2D**, tap **()**



Press or tap **EXE**

Type $- 4$

Press or tap **EXE**

The screen shows the solution, $x = 4, y = 3$

