

Solving Simultaneous Linear Equations – Interactive step by step method

Solve simultaneously :

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

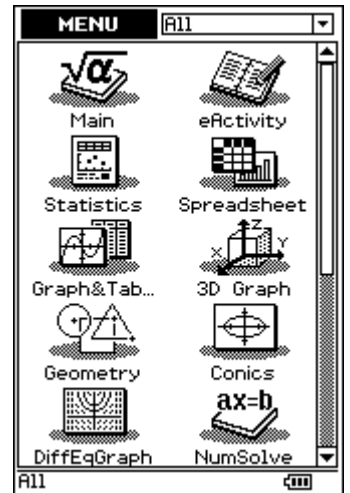
These can be solved algebraically in two main ways:

- i. Interactively step by step in the main screen
- ii. 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 ② by 3 and ADDING this to equation ①

Tap **Action, Transformation, simplify**

Enter and then highlight equation ②

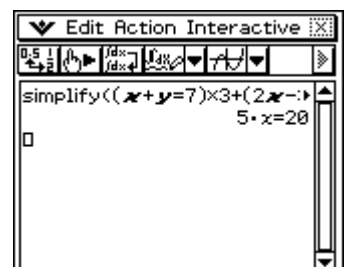
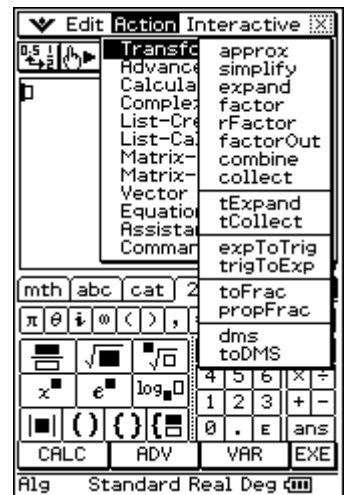
Tap

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

Enter and highlight equation ①

Tap

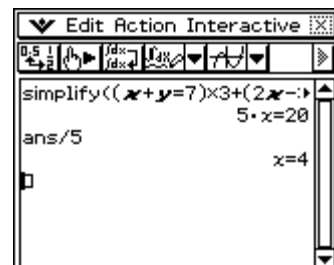
Press or tap **EXE**



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,  $x = 4, y = 3$

