

A line- multiple representations for $y = x + c$

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Select GRAPH mode from the main menu by using the arrow keys to highlight the GRAPH icon or pressing 5.



This worksheet shows how the calculator can be used to draw multiple lines, use it to see the relationship to the change in the constant 'c' in $y = mx + c$.

Introduction

Open the GRAPH-window, and make sure that the V-Window is appropriate to see the graphs that you will be drawing.

SHIFT **F3** Select **F1**, in this case for **INITIAL** conditions.

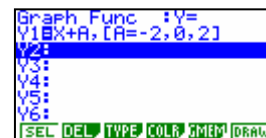


Now, the **EXIT** or **EXE** key to go back to the *Graph Func* window.

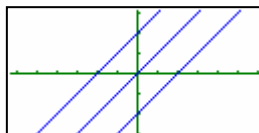
Using $[A=-2,0,2]$ at the end of the equation gives the effect of a 'dynamic graph'.

Example: Draw the graphs of $y = x - 2$, $y = x$, $y = x + 2$

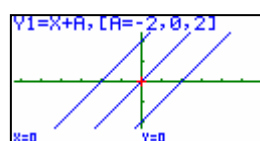
Answer: Type in $X+A, [A=-2,0,2]$ into the 'Y1 space'
Press **EXE** to store this equation



Press **EXE** or **F6** to draw the graphs. You will see the lines being drawn one at a time.



To 'trace' them use the TRACE **SHIFT** **F1**
and the \downarrow or \uparrow or \rightarrow or \leftarrow arrows to trace either of the 3 graphs
 $y = x - 2$ or $y = x$ or $y = x + 2$.



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