

## Using the $x=c$ template to graph a vertical line (Tutorial B9)

[http://www.atomiclearning.com/k12/en/movie/XXXXXX/play\\_window?type=Tutorial&sid=2421](http://www.atomiclearning.com/k12/en/movie/XXXXXX/play_window?type=Tutorial&sid=2421)

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You can graph a vertical line by dragging the value to the axis. I've typed  $x=5$  using the text tool here. I can

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now roll over the text, and then click and drag it onto the coordinate axis. The vertical line is plotted. You

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can also graph a vertical line where  $x=c$  using a template. To graph a vertical line on a coordinate plane at a value

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on the x-axis, in Graphs open the Graphs menu by clicking Document Tools. Select Graph Entry/Edit, Equation, and

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Line. The templates include slope-intercept, vertical lines, and the standard form of a linear function  $ax+by=c$ . We

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want the vertical line function  $x=c$ , so I'll select that to enter that template into the Graph Entry line. Now I

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can enter the value where the vertical line intercepts the x-axis. In this case, I'll graph the vertical line

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when  $x=3$  by typing "3" there, and then press Enter or Return to see the graph. Using the template also allows you to

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input a variable for "c". With our line graphed, you can quickly add and compare other math concepts. I'll graph

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the inequality  $x<4$  by clicking Document Tools and then choosing Actions, Text. Now I can click to insert a text



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box. I'll type x, then type the less-than symbol. Now I'll enter 4, and then press Enter or Return. To move out of

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the Text tool, I'll press esc. I'll grab the inequality by clicking it, and then I'll drag it to the x-axis. Once

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I see the graph appear, I'll click to set the graph. Now I can compare and explore my lines and their relation to

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the inequality.

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