

Defining and linking variables to a coefficient in a graph (Tutorial E2)

http://www.atomiclearning.com/k12/en/movie/27962/play_window?type=Tutorial&sid=1670

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You can define and link a variable to a coefficient in a graphed expression. To do this, I'll start from the home screen by pressing

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the Home key, and then I'll choose Calculator. Now, I'll press the Ctrl key followed by the Home key. Next, I'll select Page

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Layout, then choose Select Layout, and then Layout 2, the split vertical page layout. I'll press Ctrl and Tab to move into the

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blank work area, and then I'll press the Menu key and choose Graphs and Geometry. I'll press Ctrl and then Tab to move to the Calculator

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application. Now, I'll define the variable b by typing the letter "b," and then a colon. Next, I'll type "=6" and then press the

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Enter key. This defines the variable "b" as having a value of six. Now, I'll press Ctrl and then Tab to move to the Entry line

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of the Graphs and Geometry application, and then enter "x." Then press the "x^2" key, followed by "-b*x+12", and then I'll press

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"Enter." This graph shows me what the expression $x^2 - bx + 12$ looks like when the variable "b" is equal to six. You can change the

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size of the screen layout to make the Calculator screen smaller. To do this, press Ctrl and then Home, then choose Page Layout

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followed by Custom Split. You will then be able to move the NavPad to adjust the view. To release this, just press the Click key.

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Now, I'll change the scale on my graph so I can see more of it by pressing Menu followed by Window, and then choosing Standard

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View. If I want to see the graph for the expression when "b" is equal to -10 instead of 6, I can go back to the Calculator application

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by pressing Ctrl and then Tab, and then type "b:=-10" and then press the Enter key. Notice that the graph changes immediately

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to reflect the new definition of "b." It's important to note that variables in one problem have no relationship with variable

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in another. In this case, b has been defined only within this problem. If I create a new problem within this document, b will

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not have the same definition.

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