TI-Nspire™ Handheld Script

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

http://www.atomiclearning.com/k12/en/movie/85864/play_window?type=Tutorial&sid=2410

[00:00:00.00]
You can define and link a variable to a coefficient in
a graphed expression. To do this, I'll start from the home

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screen by pressing the Home key, and then I'll choose Calculator.
Now, I'll press the Doc key, select Page Layout, then choose

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

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

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Calculator application. Now, I'll define the variable b
by typing the letter "b." Next I'll press Ctrl, and then

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the Math Templates key, which is just to the left of the
Catalog key, this adds a colon followed by an equals sign.

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Next, I'll type "6" and then press the Enter key. This
defines the variable "b" as having a value of six. Now,

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I'll press Ctrl and then Tab to move to the Entry line
of the Graphs application, and then enter "x." Then press

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the "x^2" key, followed by "-b*x+12", and then I'll press
"Enter." This graph shows me what the expression x^2-bx+12

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looks like when the variable "b" is equal to six. You
can change the size of the screen layout to make the Calculator

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screen smaller. To do this, press the Doc key, then choose
Page Layout followed by Custom Split. You will then be

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able to use the arrows on the Touchpad to adjust the view.
To release this, just press the Click key. Now, I'll change

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the scale of my graph so I can see more of it by pressing
Menu followed by Window/ Zoom, and then choosing Zoom Standard.

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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

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application by pressing Ctrl and then Tab. Next I'll type
the letter "b," then press Ctrl and then the Math Templates

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key, to add a colon followed by an equals sign, then "-10"
and press the Enter key. Notice that the graph changes

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

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relationship with variables in another. In this case, b
has been defined only within this problem. If I create

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a new problem within this document, b will not have the
same definition.

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