TI-Nspire™ Software Script

Tracing a graph (Tutorial B3)

http://www.atomiclearning.com/k12/en/movie/86405/play_window?type=Tutorial&sid=2421

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You can trace a graph and see values for the curve, as
well as find points of interest such as the minimum, maximum,

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zeroes, and intersections. CAS users can even find inflection
points. I'll create a new page by clicking Insert and then

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choosing Graphs. I'll enter my function, x2+ 6, by pressing
x" followed by Shift-6 to create the "^" symbol to move

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into the exponent. Next, I'll press "2," and then the right
arrow key to move out of the exponent, followed by "+6,

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and then press the Enter key to graph my parabola. To trace
the graph, I'll click Trace, which is found one the left

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side under the Document Tools, and then choose Graph Trace.
Now I can press the right and left arrow keys on the keyboard

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to move my trace cursor around the graph. If I press a
number on the keyboard, such as 2, I can see a text box

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appear with the number 2 in it. If I press Enter, I'll
jump right to the location on the curve where x=2, in this

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case. To find points of interest on this curve, for example,
let's say I want to find the minimum value of this curve,

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I can click Analyze Graph under Document Tools, and choose
minimum." Now, I can click somewhere on my graph to select

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it. I need to give a general area in which to search for
the minimum value. I'll click to start my range on the

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left side of the y axis. I'll extend the range approximately
to where the minimum value is located, and then press the

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Enter key. Notice I can see a label that says "minimum"
and the coordinates for the minimum value, (0,6), are shown.

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You can also trace more than one curve at a time. I'll
graph a second function by pressing Tab to bring up the

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entry line. I'll type "x" followed by the Enter key. Now
I'll click Trace, and this time I'll choose Trace All, and

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I'll get a view that traces all functions at the current
x value.

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