TI-Nspire™ Handheld Script

Finding the zeros of a quadratic equation using TI-Nspire™ CAS (Tutorial E6)

http://www.atomiclearning.com/k12/en/movie/85868/play_window?type=Tutorial&sid=2410

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You can find the solutions of an equation very quickly
using the TI-Nspire™ CAS handheld. Keep in mind that the

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example in this tutorial will work properly only if you
are using the CAS version, with built-in Computer Algebra

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System capabilities. Among other differences, the CAS version
allows simplified equations to keep their mathematical

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structure, and symbols such as pi and variables can be
symbolically recognized and simplified. I'll press the

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Home key and insert the Calculator application. Next, press
the Menu key, choose Algebra, and then I'll select Solve.

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This will return the "solve" function to the entry line
with a set of empty parentheses. There are two arguments

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required before the handheld can execute this function.
The first is my equation, so I need to enter that first.

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In this case, I want to find the solutions to the equation
$2x^2-5x+2=0$, so I'll press "2", then "x", followed by the

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x^2" key. Now I'll press "-", then "5", and then "x", and
then "+2". Now I'll press the "=" key and then zero. Now

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that we've entered the equation, we need to give the solve
function the second argument, which is the variable in

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which it's supposed to solve. In this case, my expression only has one variable, x, so I'll press the "," to separate

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the arguments, and then my variable, "x". To evaluate this function, I'll press the Enter key to return the solutions

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that will make my equation true. Here, I can see that this equation is true when x equals either 1/2 or 2. If we had

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done this with the TI-Nspire, we would have used the nSolve command, and it would have returned only one of the two

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solutions. Remember that the TI-Nspire™ CAS handheld has all the functionality of TI-Nspire™ technology plus built-

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in Computer Algebra System capabilities.

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