TI-*nspire*™

Solving equations with two radicals
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Activity overview
Students will follow a model of how to solve by isolating first one radical, then the other, and squaring both sides. The CAS eliminates the common mistakes students encounter when squaring binomials that include radicals.

Concepts
How many solutions might the student expect, given an equation with an unpredictable or unknown graph? How does squaring a binomial with one radical help the equation to be solved? Why must the isolating process occur twice in this strategy?

Teacher preparation
Students must have solved radical equations with a radical on just one side first. The students must be able to verify solutions, and perhaps compare the graph with the correct number of solutions.

Classroom management tips

TI-Nspire Applications
Notes, Graphs and Geometry, Calculator

Step-by-step directions
See student handout.

Assessment and evaluation
The students' documents can be collected and used as Formative assessment. Further Summative assessment can include equations with radicals on just one side or both sides. Be sure that students are checking their answers to eliminate extraneous solutions.

Activity extensions
- *Have a student "teach" the concept to another student who was absent*
- *Have students write their own equations and solve them*

Student TI-Nspire Document
Tworadicals_screenshots