Solving Systems of Quadratic Equations

Solve each system below using the following steps:

|  |  |
| --- | --- |
| **EXAMPLE** |  |
| 1. Set the two equations equal to each other
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| 1. Move everything from the right to the left side of the equation so that it will be equal to zero
 |  |
| 1. Use the quadratic formula (or completing the square, or factoring) to solve for *x*.
 |  |
| 1. Pick one of the original equations and plug in the *x-*values to determine the *y*-values.
 |  |
|  for  |  for  |
| 1. Check your point(s) against the graph.

*If your solution point(s) and the intersection point(s) are the same, then your solution is correct.* | The solutions to the systemare  |

Solve each system and verify your solution(s) using the graph.

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|  |  |  |  |
|  | *The graphs never cross!**So there will be no real solutions. Stop working when you get the square root of a negative number. That proves that there are no real solutions.* |  |  |
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