

Review Game

Quadratic Equation Solutions Game

Materials: large bowl, slips of paper

For this game, you must identify the number of solutions a quadratic equation has.

Before playing, write each of the following equations on a slip of paper.

	Number of Solutions		Number of Solutions
$x^2 + 7x + 10 = 0$	2	$9x^2 + 42x + 49 = 0$	1
$-2x^2 + 3x - 15 = 0$	0	$5x^2 + x - 1 = 0$	2
$x^2 + 6x + 18 = 0$	0	$2x^2 - 7x + 9 = 0$	0
$2x^2 + 5x - 12 = 0$	2	$x^2 - 5x - 3 = 0$	2
$-3x^2 + 5x + 11 = 0$	2	$4x^2 - 20x + 25 = 0$	1
$-7x^2 + 30x - 18 = 0$	2	$5x^2 - 2x + 13 = 0$	0
$-x^2 + 14x - 49 = 0$	1	$-2x^2 - 3x + 21 = 0$	2
$10x^2 - 20x + 10 = 0$	1	$3x^2 + 14x + 22 = 0$	0
$2x^2 + 8x - 13 = 0$	2	$9x^2 - 30x + 25 = 0$	1
$x^2 - 5x + 14 = 0$	0	$x^2 - 5x - 14 = 0$	2
$2x^2 - 5x + 12 = 0$	0	$-1 + 2x - x^2 = 0$	1
$7x^2 + 30x - 18 = 0$	2	$x^2 + 5x + 3 = 0$	2
$8x^2 - 3x + 4 = 0$	0	$-x^2 + 8x - 12 = 0$	2
$4x^2 - 4x + 1 = 0$	1	$16x^2 + 56x + 49 = 0$	1
$7 - 3x - 2x^2 = 0$	2	$x^2 - 9x + 28 = 0$	0

Place each slip in the container.

- Players take turns drawing an equation from the container. (You should look at the equation that you are choosing.) You may only choose one equation per turn. Do *not* return the equation to the container after your turn.
- Find the number of solutions for each equation. You receive 0 points if you choose an equation with no real solution, 1 point for an equation with 1 real solution, and 2 points for an equation with 2 real solutions. Keep a running total of your points.
- The player with the most points after the last equation is drawn from the container is the winner.