

Algebra 2
4-8d Complex Numbers D

Name _____
Date _____ A#7-8

Goal: Solve quadratic equations with complex solutions



Review: When solving a quadratic equation, or graphing a function, we can tell that there are no real solutions when:	Graph	Radicals
--	--------------	-----------------

Example A: Completing the Square	Example B: Quadratic Formula
$x^2 + 6x + 40 = 0$	$2x^2 + 3x + 4 = 0$
Example C: Completing the Square	Example D: Quadratic Formula
$x^2 + 4x + 28 = 0$	$x^2 + 4x + 28 = 0$

Solve by completing the square.

1. $x^2 + 8x + 41 = 0$

2. $x^2 + 10x + 65 = 0$

3. $x^2 - 2x + 49 = 0$

Algebra 2
4-8d Complex Numbers D

A#7-8

Solve using the quadratic formula, radicals or completing the square.

4. $x^2 + 6 = 0$

5. $x^2 + 3x + 5 = 0$

6. $x^2 + x + 14 = 0$

7. $x^2 = -x - 1$

8. $3x^2 - 3x + 5 = 0$

9. $x^2 - 2x + 3 = 0$