

Unit 2B Test Review

Solve the following by factoring.

1)	$x^2 = 15x - 56$	2)	$3x^2 + 14x - 49 = 0$
3)	$2x^2 - 14x = -3x$	4)	$5x^2 = 35x - 60$

Solve the following using completing the square/square root method. Be sure to simplify all radicals.

5)	$(x + 3)^2 - 98 = 0$	6)	$x^2 + 12x + 61 = 0$
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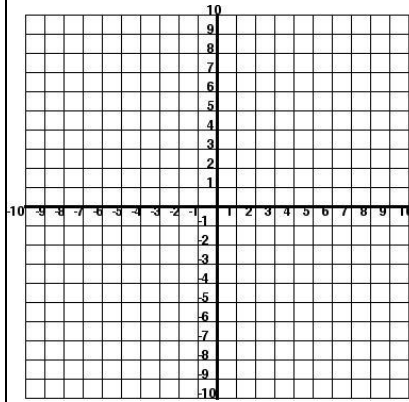
Solve the following using the quadratic formula. Be sure to simplify all radicals.

7)	$x^2 + 6x + 25 = 0$	8)	$-2x^2 + 8x + 3 = 0$
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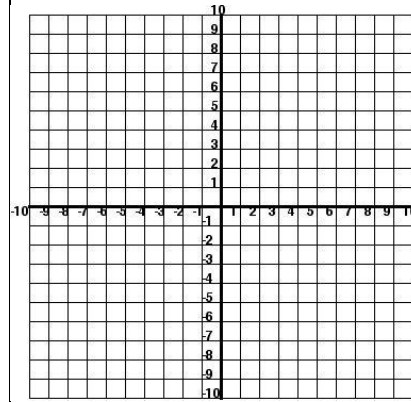
Write down the formula for the discriminant and what the value of the discriminant tells you about the number and types of solutions.

Solve the following systems by graphing.

9) $y = x^2 + 6x$
 $y = 7$



10) $y = -x^2 + 2x + 7$
 $y - 1 = x$



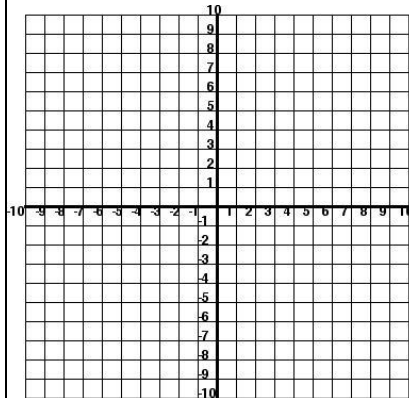
Solve the following systems algebraically.

11) $y = x^2 + 6x + 10$
 $y = -2x - 6$

12) $y = x^2 + 7x + 5$
 $y - x = -3$

Graph the following inequalities.

13) $y < x^2 - 6x + 2$



14) $y \leq -x^2 - 4x + 4$

