QUADRATIC EQUATIONS – 1. SOLVING QUADRATICS

Name:

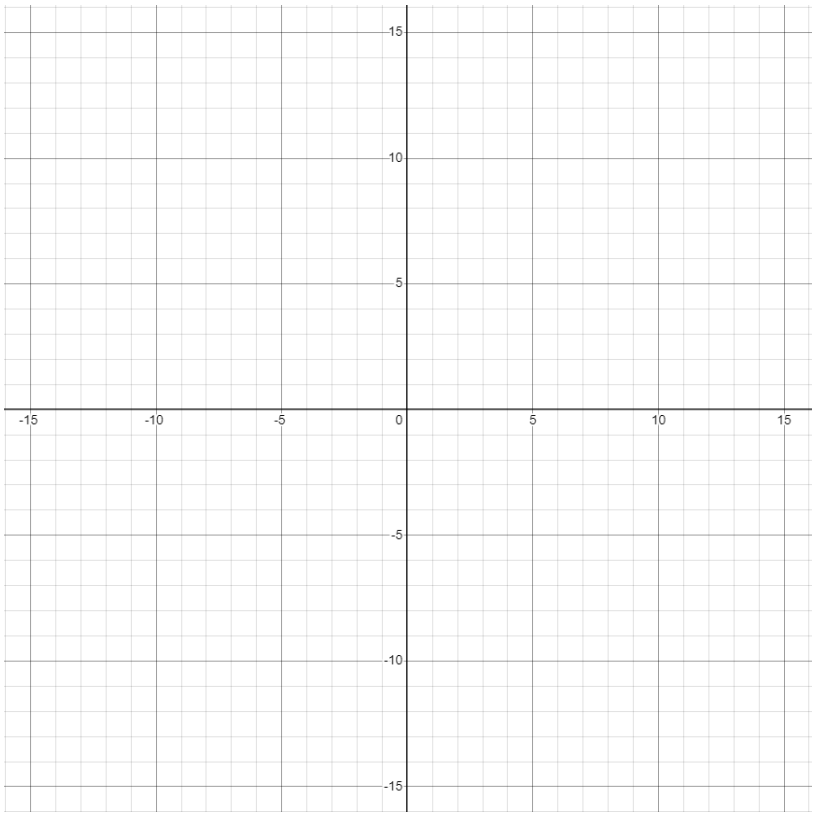
Date:

Please remember to show/communicate all your work. You DO NOT need to answer every question, two correct answers at any level will demonstrate a student's level of attainment.

LEGEND						
✓	M	✘	S	N	G	H
correct	mostly correct	incorrect	silly mistake	did not know how to start or skipped	with group	got help

	Mild (🌶🌶)		Medium (🌶🌶🌶)		Spicey (🌶🌶🌶🌶)
Questions	#1	#2	#3	#4	#5
Results					

1. Given the roots of $x = 3$ & $x = -4$, provide a possible quadratic equation and graph it.



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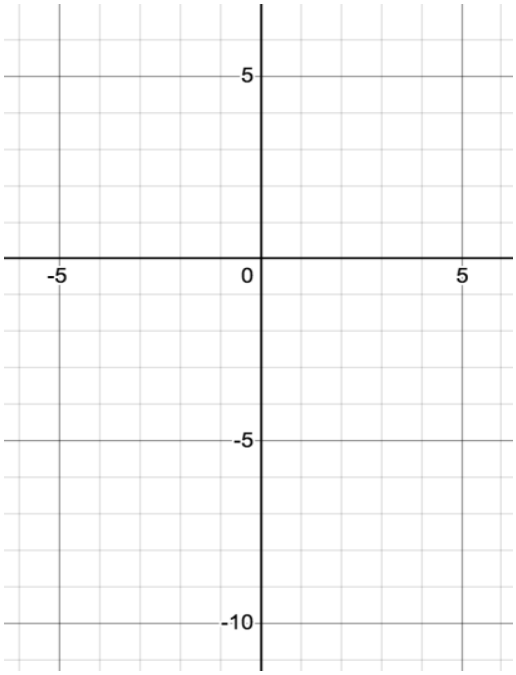
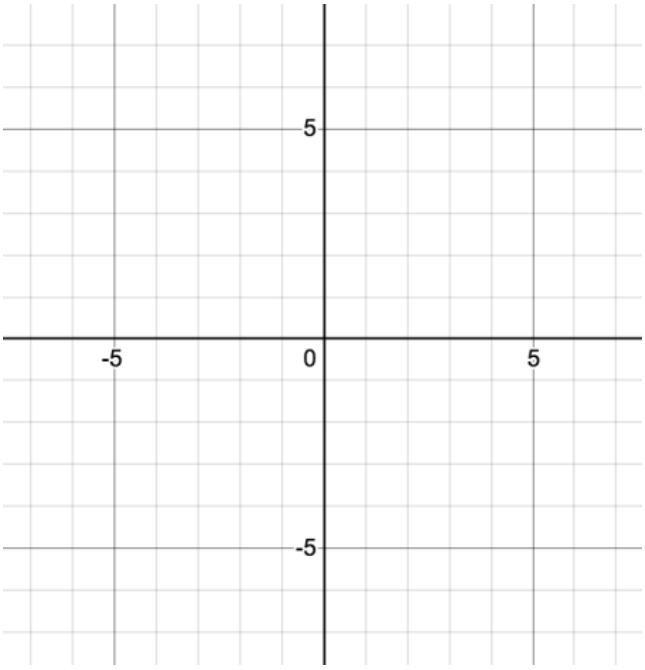
2. Find the roots of $3x^2 - x - 10 = y$ using two methods: Factoring & Graphing.

a) Factoring:

b) Graphing:



3. Find the solutions of $x^2 - 5x = 2x - 6$ by graphing



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4. For each of the following, solve the roots of the equation by completing the square.

   a) $-2x^2 + 8x - 3 = 0$

   b) $3x^2 + 2x + \frac{7}{3} = 0$

5. Determine a value(s) of 'c' in $y = 3x^2 + 8x + c$ such that the line $y = 2x - 1$ will intersect with the quadratic relation at:

   a) only one point
   b) two points
   c) no point