Name _

1-5 Reteach to Build Understanding

Solving Equations and Inequalities by Graphing

- 1. The inequality $x^2 9x + 8 > 0$ is shown in the graph. Find the values of x that result in the equation being greater than 0.
 - a. Highlight the lines on the graph where y > 0 (or above the x-axis). All of these points are solutions.
 - **b.** Circle the points where the graph crosses the *x*-axis. These points are where the expression is equal to zero. These are not solutions.
- oints are solutions. crosses the x-axis. sion is equal to zero.
 - **c.** Draw an arrow pointing left or right from each point showing where the graph crosses the *x*-axis. The arrows show one of the directions that the graph is going from that point.
 - d. Solve by filling in the table:

	Choose < or > based off of arrow direction.	Point that graph intersects the <i>x</i> axis
	Left: less than (<) Right: greater than (>)	
X		
x		

2. Kennedy graphed the equation $x^2 - 4x + 3 < 0$. Based on the graph she concluded that x < 1 or x > 3. What mistake did she make? What is the correct solution?

- 3. Solve $|x + 2| 3 = x^2 6x + 5$ by graphing.
 - a. Circle the points of intersection.
 - **b.** Write the *x* values for the answer:







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