

Name:	Date:
Topic:	Class:

Main Ideas/Questions	Notes/Examples												
<p><b>WARM-UP:</b> Perfect Square Trinomials</p>	<p><b>Factor the following trinomials:</b></p> <ul style="list-style-type: none"> <li>• <math>x^2 + 8x + 16 =</math> _____</li> <li>• <math>x^2 - 18x + 81 =</math> _____</li> <li>• <math>x^2 + 2x + 1 =</math> _____</li> <li>• <math>x^2 - 10x + 25 =</math> _____</li> </ul> <p>These are called <b>perfect square trinomials</b>. If you have a perfect square trinomial, you can solve the quadratic equation by square roots!</p>												
	<p><b>EXAMPLES</b></p> <p><b>Directions:</b> Factor the perfect square trinomial, then solve the equation by square roots. Remember a positive number always has two square roots, so you must solve for both cases.</p>												
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<p><b>COMPLETING THE SQUARE</b> (when <math>a = 1</math>)</p>	<p>When you do not have a perfect square trinomial, you can create one. This process is called <b>completing the square</b>. Follow the steps below to solve the equation by completing the square.</p>												
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