

Common Core State Standards for Mathematics		
Domain: Reasoning with Equations and Inequalities		
Solving Quadratic Equations (A-REI.4)		
High School		
Score	In addition to Score 3.0, in-depth inferences and applications that go beyond instruction to the standard. The student will:	Example Activities
4.0	<ul style="list-style-type: none"> <li>solve quadratic inequalities in one variable. (A-REI.4b)</li> </ul>	
3.5	In addition to score 3.0 performance, in-depth inferences and applications with partial success.	
3.0	<p><b>The student will:</b></p> <ul style="list-style-type: none"> <li>use the method of completing the square to transform any quadratic equation in <math>x</math> into an equation of the form <math>(x-p)^2 = q</math> that has the solutions. (A-REI.4a)</li> <li>derive the quadratic formula using the method of completing the square. (A-REI.4a)</li> <li>write complex solutions as <math>a \pm bi</math> for real numbers <math>a</math> and <math>b</math> (A-REI.4b)</li> </ul> <p><b>The student exhibits no major errors or omissions.</b></p>	<p><u>Independent Practice</u> - Students will be given quadratic equations and will work independently using the method of completing the square to convert the equation to the form <math>(x-p)^2 = q</math>. The teacher will monitor the students as they work and will provide immediate and specific feedback regarding the accuracy of each student's conversion.</p>
2.5	No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content	
2.0	<p><b>There are no major errors or omissions regarding the simpler details and processes as the student will:</b></p> <ul style="list-style-type: none"> <li>recognize or recall specific vocabulary, such as: <ul style="list-style-type: none"> <li>quadratic equation</li> </ul> </li> <li>perform basic processes, such as: <ul style="list-style-type: none"> <li>solve quadratic equations in one variable (e.g., inspection, taking square roots, the quadratic formula and factoring) (A-REI.4b)</li> </ul> </li> </ul> <p><b>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</b></p>	<p><u>Simultaneous Response</u> – Students will utilize a simultaneous response system (e.g., white boards, clickers, socrative) solve quadratic equations in one variable (using methods such as taking square roots, the quadratic formula, factoring). The teacher will provide immediate specific feedback to the students as she presents each equation.</p>
1.5	Partial knowledge of the 2.0 content but major errors or omissions regarding the 3.0 content	
1.0	With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.	
0.5	With help, a partial understanding of the 2.0 content but not the 3.0 content	
0.0	Even with help, no understanding or skill demonstrated.	