

<b>St. Matthew Catholic School</b>	<b>Subject: Algebra I (HS Algebra 1,2)</b>	<b>Teacher: Mr. Boegel Mr. Motamed</b>
	<b>Unit 05 – Factoring, Solving, Analyzing Quadratic Eqns. and Functions</b>	

<i>Timeline:</i>	<i>PEARL, Character Traits</i>	<i>Common Core Standards</i>	<i>"I Can" Statements</i>	<i>Content</i>	<i>Skills</i>	<i>Assessment</i>	<i>Instructional Strategies &amp; Resources</i>
<b>March 31 to April 25, 2014</b>	L6 L3 P1 Compassion Integrity Sincerity Being Safe Selflessly Helpful Respectful Responsible Building Friendships Caring Active Christian Not giving up Persevering	F-LE 1 (Quadratic Function)	-- I can solve simple quadratic equation by taking square-root of both sides of the equation. -- I can write / rearrange quadratic equation in standard form; $ax^2+bx+c=0$ -- I can solve quadratic equation by use of quadratic formula -- I can calculate and analyze the 'discriminant' -- I can calculate the vertex -- I can solve, analyze, sketch quadratic equation by analyzing the 'discriminant' -- I can use quadratic model to analyze real world / physics problems	Solve simple quadratic equation in the form of $x^2=c$ , by taking square roots  Solve quadratic equation in the form of: $ax^2+bx=c$ by use of Quadratic Formula: $x= \frac{-b \pm \sqrt{b^2-4ac}}{2a}$  Calculate and analyze discriminant: $b^2-4ac$ for when --- there are two real solutions --- there are two real, repeating solutions --- there is NO Real Solution  -- Graph / Sketch Quadratic Function ---- Identify vertex ---- Identify localized Min or Max point ---- Identify Roots if any ---- Describe the general shape of function	-- Take Square Roots and Approximate Sqr. Roots  -- Solve Simple Quadratic Equation -- Use Quadratic Formula to solve Quadratic equation -- Calculate 'discriminant' -- Calculate Vertex and identify Min or Max -- Sketch Function	-- Informal QA in the class -- Daily single question and discussion -- Successfully complete and turn in HW's (~ 1 to 2 per week) -- Successfully complete Quizzes -- Successfully (~ 1 per week) complete unit assessment (~ 1 per month) -- Quizzes and Tests are designed to evaluate, reinforce and provide feedback on all the skills stated in this unit.	-- Text Book, Chapter 9 -- Worksheets (posted) -- Mr. Motamed's website: <a href="http://www.MrMTeaching.com">www.MrMTeaching.com</a> -- Class Notes (posted) -- Mixed Review -- Worksheets from Punchline Algebra, Marcy Mathworks -- Math Circle -- Peer-Peer Teaching

EE= Expressions and Equations SSE= Seeings Structure in Expression CED= Creating Equation REI= Reasoning with Equations and Inequalities RP= Ratios and Proportional Relationships  
Text Book: Mathematics Concepts and Skills, Course 1; Larson, Boswell, Kanold, Stiff; McDougal Littell