

St. Matthew Catholic School

**Subject: Advanced Algebra PLUS
(Extensive Review of Algebra I and Selected Topics of Algebra II)**

Teacher: Mr. Motamed

Unit 03 – Write, Graph, Analyze Systems of Linear Equations and Inequalities with Emphasis on Application of Linear Programming (Optimization of Given Case, Based on Set Constraints and Given Optimization Model)

<i>Timeline:</i>	<i>Standards</i>	<i>Content</i>	<i>Skills</i>	<i>Assessment</i>	<i>Instructional Strategies & Resources</i>
November 1 to December 21, 2012	CA1: 3, 4, 5 CA2: 3	Compound Linear Inequalities (“AND” “OR” condition) Absolute Value Inequality	-- Solve and Graph solutions of Linear Inequality -- One-Step, Two-Step and Multi-Step Inequalities, including negative coefficient. Inequality direction switches. -- Solve and Graph Compound Inequality -- Solve and Graph Absolute Inequalities -- Graph Lines and Identify point of intersection	-- Informal QA in the class -- Daily single question and discussion -- Successfully complete and turn in HW’s -- Successfully complete Quizzes -- Successfully complete unit assessment -- Successfully complete assignments and test on Matheletics	-- Text Books, Algebra 1 Chapter 6 and 7 -- Write up / Handout by Mr. Motamed on Linear Programming -- Worksheets -- Mr. Motamed’s website: www.MrMTeaching Math.com -- Class Notes (posted) -- Extensive Mixed Review -- Worksheets from Punch line Algebra, Marcy Mathworks
	CA1: 9,15 CA2: 2	Two Equations, Two Variables Two Line and Point of Intersection Solve System of Two Equations and Two Variables by; -- Graphing Method -- Substitution Method	Inequalities -- Graph Lines and Identify point of intersection -- Solve System of Linear Equations by graphing, by substitution, and by Linear Combination Method. -- Set up and solve word problems		
	CA1: 7	-- Linear Combination Method Application of System of Equations Systems of Linear Inequalities (Advanced: Linear Programming)	-- Graph feasible region for the system of Inequalities (Use Excel to program, graph and analyze linear programming problem)		

CA1= California Content Standards and Assessment for Algebra 1
CA2 = California Content Standards and Assessment for Algebra 2

Text Books:
Algebra I, Concepts and Skills, Mc Dougal Littell, Larson, Boswell, Knold, Stiff
Algebra II, McDougal Littell, Larson, Boswell, Knold, Stiff