

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
Algebra 2 *Chapter 3 Linear Systems and Matrices	10-12	2 nd	15 days
TEKS/Student Expectations		Examples/Specifications:	
<p><i>The student uses properties and attributes of functions and applies functions to problem situations. Following are performance descriptions.</i></p> <p>2A.1.A – For a variety of situations, the student identifies the mathematical domains and ranges and determines reasonable domain and range values for given situations.</p> <p><i>The student understands the importance of the skills required to manipulate symbols in order to solve problems and uses the necessary algebraic skills required to simplify algebraic expressions and solve equations and inequalities in problem situations. Following are performance descriptions.</i></p> <p>2A.2.A - The student uses tools including matrices, factoring, and properties of exponents to simplify expressions and transform and solve equations.</p> <p><i>The student formulates systems of equations and inequalities from problem situations, uses a variety of methods to solve them, and analyzes the solutions in terms of the situations. Following are performance descriptions.</i></p> <p>2A.3.A - The student analyzes situations and formulates systems of equations or inequalities in two or more unknowns to solve problems.</p> <p>2A.3.B - The student uses algebraic methods, graphs, tables, or matrices, to solve systems of equations or inequalities.</p> <p>2A.3.C – For given contexts, the student interprets and determines the reasonableness of solutions to systems of equations or inequalities.</p> <p>G.6.C</p>		<ul style="list-style-type: none"> ✓ Student will be able to perform basic matrix operations ✓ Student will be able to multiply matrices ✓ Student will be able to evaluate determinants and apply Cramer’s Rule ✓ Student will be able to use inverse matrices to solve linear systems ✓ Student will be able to graph systems of linear inequalities ✓ Student will be able to solve linear systems by graphing ✓ Student will be able to solve linear systems algebraically ✓ Student will be able to solve systems of linear equations in three variables 	

Process of Instruction/Products:	Instructional Resources/Textbook Correlations:		
<p>Student Inquiry lesson to promote self learning on:</p> <ol style="list-style-type: none"> 1. Solve Linear Systems by Graphing (3.1) <p>Lecture using transparencies and note taking on:</p> <ol style="list-style-type: none"> 1. Solving Linear Systems Algebraically (3.2) 2. Graph Systems of Linear Inequalities (3.3) 3. Solve systems of Linear Equations in three Variables (3.4) 4. Perform Basic Matrix Operations (3.5) 5. Multiply Matrices (3.6) 6. Evaluate Determinants and Apply Cramer's Rule (3.7) 7. Use Inverse Matrices to Solve Linear Systems <p>White board activity for test review of concepts</p>	<p>McDougal Littell/ Larson Algebra 2</p> <p>CH 3 pages 150 - 233</p>		
Language of Instruction	Weblinks/Other Resources:		
<p>System of 2 linear equations substitution method Ordered triple consistent system of linear inequalities Elimination method matrix determinant Cramer's Rule Inconsistent system of 3 linear equations independent Dependant identity matrix inverse matrices</p>	<p>www.coolmath.com</p>		
Evaluation/External Assessment/Local Assessment:	Best Instruction Timeline:		
<p>Daily Homework In-class work End of Unit Test 2-5 Quizzes</p>	<p>Day 1 Day 2 Day 3, 4 Day 5 Day 6</p>	<p>Day 7, 8 Day 9 Day 10, 11 Day 12 Day 13</p>	<p>Day 14 Day 15</p>