

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
Algebra 2 *Chapter 9 Quadratic Relations and Conic Sections	10-12	5 th	14 days
TEKS/Student Expectations		Examples/Specifications:	
<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><i>The student knows the relationship between the geometric and algebraic descriptions of conic sections. Following are performance descriptions.</i></p> <p>2A.5.A – The student describes a conic section as the intersection of a plane and a cone.</p> <p>2A.5.B – In order to sketch graphs of conic sections, the student relates simple parameter changes in the equation to corresponding changes in the graph</p> <p>2A.5.C – In order to sketch graphs of conic sections, the student relates simple parameter changes in the equation to corresponding changes in the graph</p> <p>2A.5.D – The student identifies the conic section from a given equation.</p> <p>2A.5.E – The student uses the method of completing the square.</p> <p>G.7.A,C</p>		<ul style="list-style-type: none"> ✓ Student will be able to apply the distance and midpoint formulas ✓ The student identifies the conic section from a given equation. ✓ Student will be able to graph and write equations of parabolas ✓ Student will be able to graph and write equations of circles ✓ Student will be able to graph and write equations of ellipses ✓ Student will be able to graph and write equations of hyperbolas ✓ Student will be able to translate and classify conic sections 	

Process of Instruction/Products:	Instructional Resources/Textbook Correlations:										
Lecture using transparencies and note taking on: <ol style="list-style-type: none"> 1. Apply the Distance and Midpoint Formulas (9.1) 2. Graph and Write Equations of Parabolas (9.2) 3. Graph and Write Equations of Circles (9.3) 4. Graph and Write Equations of Ellipses (9.4) 5. Graph and Write Equations of Hyperbolas(9.5) 6. Translate and Classify Conic Sections (9.6) 7. Solve Quadratic Systems (9.7) Math Activity and student directed assignment for test review of concepts	McDougal Littell/ Larson Algebra 2 CH 9 pages 612 - 679										
Language of Instruction	Weblinks/Other Resources:										
Distance formula focus(foci) directrix circle Ellipse vertices major axis minor axis Hyperbola transverse axis conic sections General second-degree equation Quadratic system	www.coolmath.com										
Evaluation/External Assessment/Local Assessment:	Best Instruction Timeline:										
Daily Homework In-class work End of Unit Test 2-6 Quizzes	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Day 1</td> <td style="width: 50%;">Day 8, 9</td> </tr> <tr> <td>Day 2, 3</td> <td>Day 10, 11</td> </tr> <tr> <td>Day 4</td> <td>Day 12</td> </tr> <tr> <td>Day 5</td> <td>Day 13</td> </tr> <tr> <td>Day 6, 7</td> <td>Day 14</td> </tr> </table>	Day 1	Day 8, 9	Day 2, 3	Day 10, 11	Day 4	Day 12	Day 5	Day 13	Day 6, 7	Day 14
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