


Algebra Curriculum Bundle # 7

Title	Suggested Dates
Linear Systems, begin Working with Exponents	 January 5 – January 29 (18 days)

Big Idea/Enduring Understanding	Guiding Questions
No matter how you choose to solve a linear system, you are always looking for the point of intersection.	<ol style="list-style-type: none"> 1. How many different ways can you solve a system? 2. How do you choose which method to use? 3. What does the solution to a system, or the intersection point, represent in a real life situation?

The resources included here provide teaching examples and/or meaningful learning experiences to address the District Curriculum. In order to address the TEKS to the proper depth and complexity, teachers are encouraged to use resources to the degree that they are congruent with the TEKS and research-based best practices. Teaching using only the suggested resources does not guarantee student mastery of all standards. Teachers must use professional judgment to select among these and/or other resources to teach the District Curriculum.

Knowledge & Skills with Student Expectations	District Specificity/Examples	Suggested Resources (See note above)	
<p>A.8 The student formulates systems of linear equations from problem situations, uses a variety of methods to solve them, and analyzes the solutions in terms of the situation.</p> <p>A.8B The student solves systems of linear equations using concrete models, graphs, tables, and algebraic methods.</p>	<ul style="list-style-type: none"> • Solve systems of linear equations using elimination, substitution, graphing and matrices with and without graphing technology 	<p>Holt: Section 6.1 – 6.4, 6.1 lab, 6.2 lab</p> <p>Discovering: Section 5.1 – 5.4</p>	<p>Dana Center The Exercise Pen</p> <p>LTF: Solving Systems of Linear Equations Use Tables and Graphs to Determine the Better Deal</p> <p>A&M: Fall Section 8.3 – 8.7</p>
<p>A.8 The student formulates systems of linear equations from problem situations, uses a variety of methods to solve them, and analyzes the solutions in terms of the situation.</p> <p>A.8A The student analyzes situations and formulates systems of linear equations in two unknowns to solve problems.</p>	<ul style="list-style-type: none"> • Identify variables for a given situation • Set up a system of linear equations based upon the problem situation 	<p>Holt: Section 6.1 – 6.4, 6.1 lab, 6.2 lab</p> <p>Discovering: Section 5.1 – 5.4</p>	<p>Dana Center The Run Bears Band Booster Club Cost and Profit</p> <p>LTF: Painting the House</p> <p>A&M: Fall Section 8.3 – 8.7</p>

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<p>A.8 The student formulates systems of linear equations from problem situations, uses a variety of methods to solve them, and analyzes the solutions in terms of the situation.</p> <p>A.8C The student interprets and determines the reasonableness of solutions to systems of linear equations.</p>	<ul style="list-style-type: none"> • Determine the intersection of the system of linear equations from the graph and relating it to the problem situation. • Relate the solution from a table of values of the linear equations and interpret the reasonableness of that solution. • Interpret the algebraic solution to a system of linear equations and relate it to the problem situation. 	<p>Holt: Section 6.1 – 6.4, 6.1 lab, 6.2 lab</p> <p>Discovering: Section 5.1 – 5.4</p> <p>TI.com: “All on the Line” systems activity</p>	<p>Dana Center The Walk</p> <p>LTF: A Study of Olympic Winning Times</p> <p>A&M: Fall Section 8.3 – 8.7</p>
<p>A.11 The student understands there are situations modeled by functions that are neither linear nor quadratic and models the situations.</p> <p>A.11A The student uses patterns to generate the laws of exponents and applies them in problem-solving situations.</p> <p>Note: Focus on multiplying, dividing, adding, and subtracting monomials with exponents.</p>	<ul style="list-style-type: none"> • Use iteration, repeated multiplication and division, tables, and/or models to generate laws of exponents. • Use laws of exponents to find area, given length & width. • Use laws of exponents to find length or width given area. • Examples: <ul style="list-style-type: none"> ○ Given length = $2x^2y$ and width = $4x^3y$, find area. ○ Area = $525x^5y^8$ and length = $25x^2y^4$, find width 	<p>Holt: Section 7.3 – 7.8, 7.3 lab, 7.6 lab, 7.7 lab</p> <p>Discovering: Section 6.3, 6.5, 6.6</p>	<p>Dana Center Window Panes</p> <p>A&M: Spring Section 2.1 – 2.6</p>