

<u>DATE</u>	<u>WEEK</u>	<u>UNIT</u>	<u>STUDENT LEARNING OBJECTIVE</u>	<u>CORRESPONDING CCSS</u>	<u>ASSESSMENT</u>	<u>ASSESSMENT DATE</u>
	Week 1	3 (Gr.9)	<p>Recap:</p> <ul style="list-style-type: none"> <li>Explain why the sum or difference of two linear equations results in an equation that produces a line that passes through the point of intersection of the original system of equations.</li> <li>Use the “elimination method” to solve a system of linear equations in two variables, resulting from real-world and mathematical contexts.</li> </ul>	A-REI.5		
	Week 2	3 (Gr.9)	<ul style="list-style-type: none"> <li>Use the “substitution method” to solve a system of linear equations in two variables, resulting from real-world and mathematical contexts.</li> <li>Solve systems of linear equations approximately or exactly by using a graph and identifying the point of intersection.</li> </ul>	A-REI.5 A-REI.6		
	Week 3		<ul style="list-style-type: none"> <li>Solve systems of linear equations approximately or exactly by using a graph and identifying the point of intersection.</li> <li>From the graph, determine whether a system of linear equations has one solution, no solution, or infinitely many solutions.</li> </ul>	A-REI.6	MATH MAP EXAM	
	Week 4	6 (Gr.9)	<p><b><u>Connecting Algebra and Geometry Through Coordinates</u></b></p> <ul style="list-style-type: none"> <li>Discover that the slopes of parallel lines are equal and that the slopes of perpendicular lines have a product of <math>-1</math>, through an investigative approach.</li> </ul>	G-GPE.5 G-GPE.4,5		

			<ul style="list-style-type: none"> <li>Calculate the distance between points.</li> </ul>			
	Week 5	6 (Gr.9)	<ul style="list-style-type: none"> <li>Use slope and distance to prove (or disprove) geometric theorems and definitions (e.g. <i>prove/disprove that a given triangle on a coordinate plane is a right triangle</i>).</li> <li>Write an equation for a line that passes through a given point and is either parallel or perpendicular to the graph of another line, both in a real-world and Mathematical context.</li> </ul>	G-GPE.4,5		
	Week 6	6 (Gr.9)	<ul style="list-style-type: none"> <li>Use the distance formula and coordinate points to compute perimeters of polygons and areas of triangles and rectangles.</li> </ul>	G-GPE.7		
	Week 7	1	<p><b>Extending the Number System</b></p> <ul style="list-style-type: none"> <li>Use the Power of a Power Property to discover that rational exponents are possible.</li> <li>Understand and <i>explain</i> the connection between rational exponents and <u>radicals</u> and discover the rule <math>x^{1/n} = \sqrt[n]{x}</math>.</li> <li>Rewrite expressions involving rational exponents as radicals and rewrite radical expressions using rational exponents.</li> <li>Evaluate an exponential expression with a rational exponent from a context, using a calculator.</li> </ul>	Intro to N-RN.1 N-RN.1 N-RN.2		
	Week 8	1	<ul style="list-style-type: none"> <li>Use properties of exponents to multiply and divide expressions with rational exponents.</li> </ul>	N-RN.2 Intro to N-RN.3 N-RN.3	MID-TERM EXAM	

			<ul style="list-style-type: none"> <li>1Solve basic equations involving radicals and rational exponents including problems from a context.</li> <li>Experiment with adding and multiplying rational and irrational numbers in order to discover what type of number the sum or product will be, e.g. will <math>\sqrt{2} + 4</math> be a rational or irrational number?</li> <li>Explain the following 4 situations with examples: Rational + Rational = Rational Rational <math>\times</math> Rational = Rational Rational + Irrational = Irrational Rational <math>\times</math> Irrational = Irrational</li> </ul>			
	Week 9	1	<ul style="list-style-type: none"> <li>Experiment with adding, subtracting, and multiplying polynomials in order to understand that polynomials are closed under those operations.</li> <li>Find the sum or difference of polynomials by combining like terms.</li> <li>Find the perimeter of a polygon that has linear expressions to represent each side length.</li> </ul>	<i>A-APR.1</i>		
	Week 10	1	<ul style="list-style-type: none"> <li>Find the product of two polynomials by using the distributive property, and simply the expression by combining like terms.</li> <li>Find the area of a rectangle that has linear expressions to represent each side length</li> <li>Discover the need for imaginary numbers and define <math>i</math> as <math>i = \sqrt{-1}</math></li> </ul>	<i>A-APR.1</i> <i>N-CN.1</i>		

			<ul style="list-style-type: none"><li>• Rewrite imaginary radicals using <math>i</math>, such as <math>\sqrt{-20} = 2i\sqrt{5}</math>.</li></ul>			
	Week 11	1	<ul style="list-style-type: none"><li>• Use the commutative and associative properties to add and subtract complex numbers, and solve circuitry problems involving addition and subtraction of complex numbers (with <math>i^2</math> as the highest power).</li><li>• Multiply complex numbers using the distributive property, for a product that has <math>i^2</math> as the highest power.</li></ul>	<i>N-CN.2</i>		