


Organization Name		Robbinsdale Area Schools Adult Academic Program
--------------------------	-----------------------------------------------------------------------------------	--------------------------------------------------------

Class or Program Name	Advanced Mathematics Preparation -- Level Three				
<i>Class Site(s)</i>	Sandburg Learning Center, Room 208		<i>Program Area</i>	GED ABE	
<i>Student Placement Level(s)</i>	High Intermediate ABE +	<i>Class Assessment(s)</i>	TABE M+	<i>Scaled Score Range</i>	6.0+ GLE
<i>Class Led By</i>	Paid Teacher	<i>Delivery Style</i>	Class		
<i>Class Goals</i>	<p>The students will be able to:</p> <ul style="list-style-type: none"> • Build solution pathways and lines of reasoning within the content below. • Represent problems in different forms. (Algebraically, Graphically, Numerically) • Build steps of problem solving and analyze the reasonableness of reasoning and solutions. • Operate with mathematical fluency. • Evaluate solutions and reasoning (recognize flaws in reasoning and counterexamples to flawed reasoning) 				
<i>Class Content</i>	<p>The class will cover the content of:</p> <ul style="list-style-type: none"> • Number Sense: placing real numbers on a number line. Determining absolute value of real numbers. • Measurement: Use scale factors to calculate the magnitude of size change and convert between actual and scale drawing. Convert units in area and perimeter calculations. • Data Analysis: Interpret and calculate Mean, Median, Mode and missing data values. • Algebra: Using real numbers in calculation. Simplify algebraic expressions and equations. Calculating and interpreting exponential and root values. Determining domain, range and key features of linear equations and inequalities. Graphing points and linear equations and inequalities. Writing equations of linear equations and inequalities given two points or a point and a slope. • Geometry: Interpreting and calculating with angles. Knowing terminology and interpreting properties of angles and 2D planar objects. Calculating area and perimeter of 2D objects (without formulas), use of Pythagorean Theorem in right triangles. • Problem solving and Reasoning: 5 step process, problem solving strategies, missing/extra information. Use of the real and virtual TI-30 XS Multiview calculators. • Estimation: rounding, prediction, reasonableness of answer 				

Organization Name	 Robbinsdale Area Schools Adult Academic Program
<i>Class Activities</i>	<p>Class will work in the environments of:</p> <ul style="list-style-type: none"> Lecture with teacher. Small group work with discussion. Large group discussion. Experiments with real and virtual manipulative activities.
<i>Class Text(s), Educational Technology, & Other Instructional Materials</i>	<p>Number Power series CCSS – Achieve Mathematics – Steck Vaughn http://nlvm.usu.edu/ - Utah State University – National library of virtual manipulatives. www.mathopenref.com – Math Open Reference TI-30 XS multiview calculators Varied classroom manipulatives. Teacher created materials.</p>