


Organization Name		Robbinsdale Area Schools Adult Academic Program
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<i>Class or Program Name</i>	Advanced Mathematics Preparation -- Level Four				
<i>Class Site(s)</i>	Sandburg Learning Center Room 208			<i>Program Area</i>	GED ABE
<i>Student Placement Level(s)</i>	Low Adult Secondary	<i>Class Assessment(s)</i>	TABE D+	<i>Scaled Score Range</i>	9+ 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 areas of:</p> <ul style="list-style-type: none"> • Data Analysis: Permutations and Combinations calculation and interpretation. Determining line of best fit of data and interpolating and extrapolating figures based on data. Determine probability of simple and complex events. • Algebra: Calculating and graphing linear and nonlinear equations. Factoring and solving polynomial expressions and equations. Solve systems of linear and non-linear equations and inequalities. Determining domain, range and key features of non-linear equations and inequalities. Determining undefined values in algebraic expressions and equations. Writing non-linear equations based on given data. • Geometry: Calculating surface area and volume of regular and irregular 3D objects. Modify formulas for irregular objects. • Problem solving and Reasoning: 5 step process, problem solving strategies, missing/extra information. Advanced use of the real and virtual TI-30 XS Multiview calculators. Interpretation and use of the AE symbol tool sheet for free response items. • Estimation: rounding, prediction, reasonableness of answer 				

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<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 Varied classroom manipulatives. Teacher created materials.</p>