Honors Algebra II

Multivariable Systems & Linear Inequalities

Honors Algebra II Curriculum

Power Objective	**P.O. #1: Create equations and inequalities that describe numbers or relationships to solve problems through Linear Programming and 3-variable systems. (P.O. #1 Proficiency Rubric)**
Academic Vocabulary	❏ linear programming ❏ constraints ❏ feasible region ❏ dependent system ❏ independent system ❏ inconsistent system ❏ matrix
Enduring Understandings *Students understand that...*	• Some real-world problems involve multiple linear relationships. Linear programming account for all of these linear relationships and gives the solution to the problem. • The feasible region contains all the points that satisfy the constraints. • Decision makers in many organizations formulate linear programming problems as part of their management activities so the best solutions can be utilized. • Systems of three equations in three variables can be solved using some of the same algebraic methods used to solve systems of two equations in two variables. • Matrices can be used to represent and solve a system of equations without writing the variables.
Essential Questions	• Why is a graphical representation of the solution to inequalities useful? • How do linear programming problems help decision makers make quality decisions for their businesses? • How does writing equivalent equations help you solve a system of equations?