Topic 1 - Systems of Equations
- Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context.
- Solve systems of linear equations exactly and approximately.
- Explain how changes in supply and demand cause changes of goods and services.

Topic 2 - Linear Programming
- Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context.
- Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.
- Use linear programming to optimize

Topic 3 - Applying Parabolas
- Use the structure of an expression to identify ways to rewrite it.
- Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
- Solve quadratic equations in one variable.
- Interpret key features of graphs and tables in terms of quantities, and sketch graphs showing key features given a verbal description of the relationship.

Topic 4 - Compounding Interest
- Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.
- Distinguish between situations that can be modeled with linear functions and with exponential functions.
- Construct exponential functions given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).
- Interpret the parameters in a linear or exponential function in terms of a context.
- Calculate compounding interest including continuous interest

Topic 5 - Logarithms
- Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents.
- For exponential models, express as a logarithm the solution to $ab^{ct} = d$ where a, c, and d are numbers and the base b is 2, 10, or e; evaluate the logarithm using technology.

Topic 6 - Geometric Sequences
- Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers.
- Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations and translate between the two forms.
- Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs.
- Derive the formula for the sum of a finite geometric series, and use the formula to solve problems.