



# PAREF Southcrest

## Advanced Algebra 9 Topic Outline

### 1st Quarter

#### **Systems of Equations and Inequalities**

- Systems of Linear Equations in Two Variables
- Systems of Linear Equations in Several Variables
- Matrices and Systems of Linear Equations

### 2nd Quarter

#### **Systems of Equations and Inequalities**

- The Algebra of Matrices
- Inverses of Matrices and Matrix Equations
- Determinants and Cramer's Rule
- Systems of Nonlinear Equations
- Systems of Inequalities

### 3rd Quarter

#### **Exponential and Logarithmic Functions**

- Exponential Functions
- The Natural Exponential Function
- Logarithmic Functions
- Laws of Logarithms
- Exponential and Logarithmic Equations

### 4th Quarter

#### **Sequences and Series**

- Sequences and Summation Notation
- Arithmetic Sequences
- Geometric Sequences
- Mathematics of Finance