

## Mathematics Department

#1: MATHEMATICAL PROPERTIES: Students will be able to **Apply numeric, algebraic, and geometric properties.** (*Grad at Grad: Faith in Presence of God, Excellence in Education*)

**Students will:**

- 1.1 Simplify mathematical expressions
- 1.2 Use numeric, algebraic, and geometric properties to justify and prove mathematical truths

#2: SOLUTION METHODS: Students will be able to **Recognize and use appropriate solution methods.** (*Grad at Grad: Excellence in Education, Participation within Inclusive Community*)

**Students will:**

- 2.1 Use commonly accepted practices to solve a variety of equations
- 2.2 Analyze an equation's solution for accuracy

#3: PATTERNS AND DATA: Students will be able to **Recognize mathematical patterns, and analyze data.** (*Grad at Grad: Concern for Poor and Social Justice, Excellence in Education*)

**Students will:**

- 3.1 Analyze patterns and trends in data to make future predictions
- 3.2 Recognize patterns that occur in the solving process of many types of equations

#4: FUNCTIONS AND FORMULAS: Students will be able to Manipulate mathematical functions and formulas. (*Grad at Grad: Concern for Poor and Social Justice, Excellence in Education, Respect for All People*)

**Students will:**

- 4.1 Determine when and how a mathematical formula can be applied
- 4.2 Identify the characteristics of a variety of mathematical functions
- 4.3 Understand how to use mathematical functions to model real world situations

#5: TECHNOLOGY: Students will be able to **Use current technology as a tool for solving and graphing.** (*Grad at Grad: Excellence in Education*)

**Students will:**

- 5.1 Understand the capabilities of their graphing calculators and other available technology
- 5.2 Use their graphing calculators to solve and graph a variety of functions

