

## **MATH MAGAZINE CONTENTS**

### **ALGEBRA II (2<sup>ND</sup> SEMESTER)**

#### **Chapter 6 Quadratic Functions**

- Graphing Quadratic Functions ( finding axis of symmetry, vertex and corresponding points)
- Factoring Quadratic Expressions
- Solving Quadratic Equations by Factoring
- Solving Quadratic Equations by Completing the Square
- Solving Quadratic Equations using the Quadratic Formula
- Determining Number of Solutions using the Discriminant
- Complex Numbers
- Addition/Subtraction of Complex Numbers
- Multiplication of Complex Numbers
- Division of Complex Numbers
- Vertex Form of Quadratic Equations
- Transformation of Quadratic Functions using vertex form

#### **Chapter 7 Rational & Radical Functions**

- Simplifying Rational Expressions
- Adding/ Subtracting Rational Expressions
- Multiplying/Dividing Rational Expressions
- Graphing Rational Equations (identifying zeros, holes and asymptotes)
- Solving rational Equations
- Simplifying Radical Expressions
- Solving radical Equations

#### **Chapter 8 Polynomial Functions**

- Classifying polynomials
- Addition/Subtraction of Polynomials
- Multiplication of Polynomials
- Division of Polynomials (Long Method, Synthetic Division)
- The Remainder Theorem
- The Factor Theorem
- Factoring by Grouping
- Factoring the Sum or Difference of Cubes
- Identify the zeros of polynomials
- Rational Root Theorem/ Irrational Root Theorem