



Trigonometry

Objectives of Unit:

1. Understand and use trigonometric relationships of acute angles in triangles.
2. Determine side lengths of right triangles by using trigonometric functions.
3. Draw angles in standard position.
4. Determine the values of the trigonometric functions for an angle in standard position.
5. Convert angle measures between degrees and radians.
6. Find the values of trigonometric functions on the unit circle.

Complex Numbers

Objectives of Unit:

1. Define and use imaginary and complex numbers.
2. Solve quadratic equations with complex roots.
3. Perform operations with complex numbers.

Quadratic

Objectives of Unit:

1. Transform quadratic functions.
2. Describe the effects of changes in the coefficients of $y = a(x - h)^2 + k$.
3. Solving quadratic equations by graphing or factoring.
4. Determine a quadratic equation from its roots.
5. Solving quadratic equations using the Quadratic Formula.

Polynomials

Objectives of Unit:

1. Identify, evaluate, add, and subtract polynomials.
2. Classify and graph polynomials.
3. Multiply polynomials.
4. Use binomial expansion to expand binomial expressions that are raised to positive integer powers.
5. Use long division and synthetic division to divide polynomials.
6. Use the Factor Theorem to determine factors of a polynomial.
7. Factor the sum and difference of two cubes.
8. Identify the multiplicity of roots.