

**In Math 1050, students learn how to:**

- sketch graphs of polynomial, rational, exponential, and logarithmic functions,
- sketch graphs of transformations (translations and reflections) of given functions,
- identifying x- and y-intercepts, asymptotes, symmetry, and local extrema from a graph,
- perform arithmetic operations on functions and compose functions,
- find the inverses of linear, quadratic, radical, exponential, and logarithmic functions,
- determine the domain, range, intercepts, and end behaviors of polynomial, rational, exponential, and logarithmic functions,
- solve polynomial, rational, exponential, and logarithmic equations and inequalities,
- perform basic computations with complex numbers and use them in the solution of polynomial equations,
- perform basic computations with matrices and use matrices to solve systems of linear equations,
- recognize and write explicit formulas for arithmetic and geometric sequences,
- find the sums of arithmetic and geometric sequences, including infinite geometric sequences, when possible.