Learning Objectives and Prerequisites
At the end of MATH 035 students should
Understand and implement operations

- Interpret functions algebraically, graphically, and numerically
- Perform operations with polynomials
- Perform operations with complex numbers
- Simplify radicals
- Simplify rational expressions, including complex fractions
- Apply the properties of rational exponents

Identify and apply appropriate techniques to solve linear, quadratic, and radical equations.

- Factor polynomials, including perfect square trinomials, difference of two squares, sum and difference of cubes, trinomials, and four-term polynomials
- Write linear equations given a graph, list of points, slope and a point, other information
- Use and apply the definitions of parallel and perpendicular lines and relate to slope
- Solve and graph quadratic equations by the square root property, factoring and the quadratic formula
- Solve radical equations
- Solve rational equations
- Solve $2 \times 2$ systems of linear equations graphically, by substitution, and by elimination

Demonstrate understanding of functions and function notation.

- Identify the Doman and Range of a function
- Find values for functions
- Graph functions.

Solve a variety of application problems in the above areas
Apply the use of appropriate computer technology in order to be successful in the course

- Demonstrate proficient use of email, MyMathLab, and Blackboard technologies
- Use a scientific calculator proficiently as related to coursework


## Prerequisite Knowledge and Skills Needed

- Completion of MATH 015 (see objectives for this course) with a C or better or
- Appropriate score on math placement test (currently 7-11 on the MapleTA)

