

*Montgomery College - Department of Mathematics
Rockville Campus*

**MA091 and MA091A - Elementary Algebra
0 Semester Hours**

Description	A presentation of the basic concepts of algebra: linear equations in one and two variables including systems and graphing, linear inequalities, literal equations, integer exponents, polynomials, factoring, quadratic equations, and simple rational expressions. Applications are included throughout the course.
Prerequisites	MA091 meets 3 hours each week. MA091A meets 5 hours each week A grade of A, B, C, or S in MA090, appropriate score on the mathematics assessment test, or consent of department. MA091A is strongly recommended for students who have earned a grade of C in MA090 or who have never taken an algebra course or who are repeating MA091.
Topics	Assessment level: RD099/103. I. Solving linear equations and inequalities in one variable II. Solve literal equations for a specified variable III. Graphing linear equations in two variables 1. Cartesian coordinate system 2. Slope 3. Deriving equations of lines IV. Solving systems of linear equations in two variables V. Exponents VI. Polynomials 1. Basic operations with polynomials VII. Factoring 1. Common factors 2. Trinomials 3. Difference of squares VIII. Rational expressions 1. Basic operations 2. Solving equations IX. Radicals 1. Find square roots with and without a calculator

X. Quadratic equations

1. Solve by factoring
2. Solve by quadratic formula
3. Modeling real-world applications with linear, quadratic, and/or rational equations as well as systems of linear equations.

Introductory Algebra, Third Edition, Elayn Martin-Gay,
Pearson/Prentice Hall

or

I Can Learn Algebra, Volumes 1 and 2, JRL Enterprises

Text