

Math 0308 Introductory Algebra Course Document

Credit Hours

Three semester hours

Transferability

Not transferable

Prerequisites

Math 0306 or placement by testing

Course Description

Basic algebraic operations, elementary equations, laws of integral exponents, factoring and radical notation, rational expressions and an introduction to the Cartesian coordinate system. This course carries institutional credit but will not transfer and will not be used to meet degree requirements.

Materials

Required Textbook

Learning Outcomes

- Solve linear equations and inequalities in one variable and compound inequalities in one variable.
- Use linear equations to solve applications.
- Sketch graphs of linear relations.
- Simplify expressions using definitions and laws of integer exponents.
- Add, subtract, multiply, and divide polynomials.
- Factor polynomial expressions.
- Solve quadratic equations using the factoring method.
- Solve systems of linear equations in two variables.
- Identify restricted values of rational expressions; reduce, multiply and divide rational expressions; and add and subtract rational expressions with like denominators.

Textbook Sections

Beginning & Intermediate Algebra, 4/E
Elayn Martin-Gay
Publisher: Prentice Hall, Copyright: 2009
ISBN: 0136007317

- 2.1 Simplifying Expressions
- 2.2 The Addition and Multiplication Properties
- 2.3 Solving Linear Equations Integrated Review
- 2.4 An Introduction to Problem Solving
- 2.5 Formulas and Problem Solving
- 2.6 Percent and Mixture Problem Solving
- 2.7 Further Problem Solving
- 2.8 Solving Linear Inequalities
- 3.1 Reading Graphs / Rectangular Coordinate System
- 3.2 Graphing Linear Equations
- 3.3 Intercepts
- 3.4 Slope and Rate of Change, Integrated Review
- 3.5 Equations of lines
- 4.1 Solving Systems of Linear Equations by Graphing
- 4.2 Solving Systems by Substitution
- 4.3 Solving Systems of Linear Equations by Addition
- 5.1 Exponents
- 5.2 Polynomial Functions/ Adding Subtracting Polynomials
- 5.3 Multiplying Polynomials
- 5.4 Special Products, Integrated Review
- 5.5 Negative Exponents and Scientific Notation
- 5.6 Dividing Polynomials
- 6.1 The Greatest Common Factor Factoring by Grouping
- 6.2 Factoring Trinomials
- 6.3 Factoring Trinomials
- 6.4 Factoring Trinomials
- 6.5 Factoring Binomials, Integrated Review
- 6.6 Solving Quadratic Equations by Factoring
- 7.1 Rational Functions and Simplifying
- 7.2 Multiplying and Dividing Rational Expressions
- 7.3 Adding and Subtracting Rational Expressions