

Math 30 Sequence of Topics

EQUATIONS, INEQUALITIES AND PROBLEM SOLVING

- 2.2 & 2.3 Clearing Fractions and Decimals in Equations & Formulas and Literal Equations
- 1.3 & 2.4 Operations on Fractions Review & Applications with Percent
- 1.1 & 2.5 Translations & Problem Solving
- 2.6 Solving Inequalities
- 2.7 Solving Applications with Inequalities

INTRODUCTION TO GRAPHING

- 3.1&3.2 Reading Graphs, Plotting Points, Graphing Linear Equations
- 3.3 Graphing and Intercepts
- 3.4&3.5 Rates and Slope
- 3.6 Slope-Intercept Form
- 3.7 Point-Slope Form and Equations of Lines

TEST 1

SYSTEMS OF LINEAR EQUATIONS AND INEQUALITIES AND PROBLEM SOLVING

- 8.1 Systems of Equations in Two Variables – Graphing, Solutions
- 9.4 Inequalities in Two Variables (NOTE CHANGE IN ORDER!)
- 8.2 Solving by SUBSTITUTION OR ELIMINATION
- 8.3 Applications of Linear Systems

POLYNOMIALS

- 4.1&4.2 Exponents and Their Properties
- 4.3&4.4 Polynomials – Terminology, Addition and Subtraction
- 4.5 (&4.6) Multiplication of Polynomials (& Special Products)
- 4.6 & 4.7 Special Products & Polynomials in Several Variables (includes “degree”)
- 4.8 Division of Polynomials

TEST 2

FACTORING, SOLVING QUADRATIC EQUATIONS BY FACTORING, APPLICATIONS

- 5.1 Introduction to Factoring
- 5.2 Factoring Trinomials with Leading Coefficient of 1
- 5.3 Factoring Trinomials with Leading Coefficient not 1
- 5.4&5.5 Special Patterns (ALL)
- 5.6 General Strategy for Factoring
- 5.7 Solving Quadratic Equations by Factoring
- 5.8 Solving Applications Involving Quadratic Equations

TEST 3

FUNCTIONS

- 7.1 Introduction to Functions

RATIONAL EXPRESSIONS AND EQUATIONS

- 6.1&6.2 Rational Expressions – Introduction and Multiplication and Division
- 6.3 Addition, Subtraction and LCDs of Rational Expressions
- 6.4 Addition and Subtraction of Rational Expressions with Unlike Denominators
- 6.5 Complex Rational Expressions
- 6.6 A Rational Equations
- 6.6 B Overview of Rational Expressions and Rational Equations (Lial)
- 6.7 Applications Using Rational Equations and Proportions

EXPONENTS AND RADICALS

- 10.1 Radical Expressions and Functions
- 10.2 Rational Numbers as Exponents
- 10.3 Multiplying Rational Expressions
- 10.4 Dividing Rational Expressions
- 10.5 Expressions Containing Several Radical Terms
- 10.6 Solving Radical Equations
- 10.7 Distance Formula, Midpoint Formula, Special Triangles
- 10.8 Complex Numbers

TEST 4

QUADRATIC FUNCTIONS AND EQUATIONS

- 11.1 Quadratic Equations – Square Root Property and Completing the Square
- 11.2&11.3 Quadratic Formula and Solutions of Quadratic Equations
- 11.4 Applications Involving Quadratic Equations
- 11.6 A Quadratic Functions and Their Graphs ($y=ax^2+bx+c$ form)
- 11.6 B Quadratic Functions and Their Graphs ($y=a(x-h)^2+K$ form)

CUMULATIVE FINAL EXAM