

ALGEBRA II – TEST OUT

Test Date: August 24th, 2011

Test Time: 1:00p – 3:00p

Location: LHS HS – Downstairs Computer Lab – Rm 141

Entrance: Through Main Doors – Do Not Arrive Late, you may not be permitted to test

Description: Multiple Choice test through E2020 online program

State Standards:

http://www.michigan.gov/documents/mde/Algebra_II_9-3-09_edits_292004_7.pdf

Course Syllabus:

Lakeview Alg II CR

- Expressions, Equations and Inequalities
 - Expressions and Formulas
 - Properties of Real Numbers
 - Solving Equations
 - Solving Absolute Value Equations
 - Slope
 - Writing Linear Equations
 - Solving Inequalities
 - Two Variable Inequalities
 - Solving Compound and Absolute Value Inequalities
 - Topic Test
- Linear Relationships and Functions
 - Relations and Functions
 - Linear Equations
 - Direct Variation
 - Using Linear Models
 - Operations with Functions

- [Inverses of Functions](#)
- [Special Functions](#)
- [Vertical and Horizontal Translations](#)
- [Topic Test](#)
- [Systems of Equations](#)
 - [Solving Systems of Equations by Graphing](#)
 - [Solving Systems of Equations Algebraically](#)
 - [Solving Systems of Inequalities by Graphing](#)
 - [Linear Programming](#)
 - [Solving Systems of Equations in Three Variables](#)
 - [Parametric Equations](#)
 - [Topic Test](#)
- [Matrices](#)
 - [Organizing Data Into Matrices](#)
 - [Networks](#)
 - [Adding and Subtracting Matrices](#)
 - [Multiplication Matrix](#)
 - [Cramer's Rule](#)
 - [Vocabulary](#)
 - [Lecture](#)
 - [On-Line Content](#)
 - [Journal Activity](#)
 - [Practice / Homework](#)
 - [Quiz](#)
 - [Identity and Inverse Matrices](#)
 - [Determinants](#)
 - [Geometric Transformations with Matrices](#)
 - [Solving Systems With Matrix Equations](#)
 - [Topic Test](#)

- [Quadratic Functions](#)
 - [Properties of Parabolas](#)
 - [Solving Quadratic Equations by Graphing](#)
 - [Solving Quadratic Equations by Factoring](#)
 - [Completing the Square](#)
 - [The Quadratic Formula and the Discriminant](#)
 - [Quadratic Equations and Complex Numbers](#)
 - [Analyzing Graphs of Quadratic Functions](#)
 - [Solving Quadratic Inequalities](#)
 - [Topic Test](#)
- [Polynomials](#)
 - [Monomials](#)
 - [Polynomials](#)
 - [Dividing Polynomials](#)
 - [Factoring Polynomials](#)
 - [Roots of Real Numbers](#)
 - [Topic Test](#)
- [Polynomial Functions](#)
 - [Graphing Polynomial Functions](#)
 - [Solving Equations Using Quadratic Techniques](#)
 - [The Remainder and Factor Theorems](#)
 - [Roots and Zeros](#)
 - [Rational Zero Theorem](#)
 - [Inverse Functions and Relations](#)
 - [Inequalities and Square Root Functions](#)
 - [Topic Test](#)
- [Cumulative Exam](#)
- [Exponential and Logarithmic Functions](#)
 - [Exponential Functions](#)

- [Exponential Growth and Decay](#)
- [Logarithms and Logarithmic Functions](#)
- [Properties of Logarithms](#)
- [Common Logarithms](#)
- [Natural and base e Logarithms](#)
- [Solving Equations and Modeling](#)
- [Topic Test](#)
- [Conic Sections](#)
 - [Midpoint and Distance Formulas](#)
 - [Parabolas](#)
 - [Circles](#)
 - [Ellipses](#)
 - [Hyperbolas](#)
 - Vocabulary
 - Lecture
 - On-Line Content
 - Journal Activity
 - Lab Lecture
 - Lab Assessment
 - Practice / Homework
 - Quiz
 - [Conic Sections](#)
 - [Solving Nonlinear Systems](#)
 - [Topic Test](#)
- [Rational Functions and Radical Functions](#)
 - [Inverse, Joint and Combined Variation](#)
 - [Multiplying and Dividing Rational Expressions](#)
 - [Adding and Subtracting Rational Expressions](#)
 - [Graphing Rational Functions](#)

- [Rational Exponents](#)
- [Solving Rational Equations and Inequalities](#)
- [Radical Expressions and Radical Functions](#)
- [Simplifying Radical Expressions](#)
- [Solving Radical Equations and Inequalities](#)
- [Topic Test](#)
- [Sequences and Series](#)
 - [Arithmetic Sequences](#)
 - [Arithmetic Series](#)
 - [Geometric Sequences](#)
 - [Geometric Series](#)
 - [Infinite Geometric Series](#)
 - [Pascal's Triangle](#)
 - [Binomial Theorem](#)
 - [Recursions and Special Sequences](#)
 - [Proof and Mathematical Induction](#)
 - [Topic Test](#)
- [Probability and Statistics](#)
 - [The Fundamental Counting Principle](#)
 - [Permutations](#)
 - [Combinations](#)
 - [Probability](#)
 - [Multiplying Probabilities](#)
 - [Adding Probabilities](#)
 - [Topic Test](#)
- [Statistics](#)
 - [Measures of Central Tendency](#)
 - [Stem-and-Leaf Plots, Histograms and Circle Graphs](#)
 - [Box-and-Whisker Plots](#)

- [The Normal Distribution](#)
- [Binomial Distribution](#)
- [Standard Deviation](#)
- [Sampling and Error](#)
- [Topic Test](#)
- [Trigonometric Functions](#)
 - [Right -Triangle Trigonometry](#)
 - [Angles of Rotation](#)
 - [Functions of Angles](#)
 - [The Sine Function](#)
 - [The Cosine Function](#)
 - [The Tangent Function](#)
 - [Radian Measure and Arc Length](#)
 - [Inverses of Trigonometric Functions](#)
 - [Translations of Trigonometric Graphs](#)
 - [Circular Functions](#)
 - [Topic Test](#)
- [Trigonometric Identities](#)
 - [Trigonometric Identities](#)
 - [Verifying Trigonometric Identities](#)
 - [Area and The Law of Sines](#)
 - [The Law of Cosines](#)
 - [Sum and Difference Identities](#)
 - [Double-Angle and Half-Angle Formulas](#)
 - [Solving Trigonometric Equations](#)
 - [Topic Test](#)