

2011-2012 Course Information

The Administration requires all teachers to fill out the information on the form for the course(s) you have taught this year and/or will be teaching next year (see Mr. Lombard for clarification on this if needed).

Please make as many copies of this form as necessary to document your course(s).

Course Name

MATH 8

Is this course a **Full Credit** or a **Half Credit**?

Full Credit

Major Units covered in this Course (List in order of coverage)

Unit I. Algebraic Expressions and Equations

- translate verbal expressions into algebraic expressions
- evaluate algebraic expressions
- simplify algebraic expressions by combining like terms
- solve multi-step equations
- solve word problems by writing equations
- use equations to convert Fahrenheit to Celsius and vice versa

Unit II. Inequalities

- choose the correct inequality symbol for a given verbal inequality
- solve one, two, and multi-step inequalities; graph the solution set on a number line

Unit III. Exponents

- write standard numbers in scientific notation and vice versa
- compare numbers in scientific notation
- use laws of exponents for multiplication and division
- understand negative and zero exponents
- evaluate expressions with integral exponents

Unit IV. Proportions

- write and solve proportions to calculate map distances, unit prices, currency conversions and measurement conversions within a given system (metric and standard)

Units Covered Description Extra Text Box if needed

Unit V. Percents

- work with percents less than 1% and greater than 100%
- apply percents to tax, percent increase/decrease, simple interest, sale prices, commission, interest rates, gratuities
- estimate a percent of a quantity

Unit VI. Angle Measurements

- work with supplementary and complementary angles
- identify pairs of vertical angles as congruent
- identify angle pairs formed when two parallel lines are cut by a transversal; use algebra to determine the measure of one of these angles

Unit VII. Right Triangles

- use the Pythagorean Theorem

Unit VIII. Polynomials

- add, subtract, multiply and divide
- factor using the GCF
- factor a trinomial into two binomials

Unit IX. Transformations

- draw, describe, and identify translations, reflections, dilations, and rotations (90 and 180 degrees)

Unit X. Linear Equations

- define a function; identify domain and range
- define and determine slope of a line
- graph a linear equation using a table of values; x and y intercepts; slope and y-intercept
- solve systems of linear equations

Unit XI. Quadratic Functions

- graph a quadratic function

REVIEW FOR NEW YORK STATE MATH TEST WHEN ABOVE UNITS ARE COMPLETED

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MATHEMATICS-Course III (Prentice Hall)

Describe any Project and/or Research Papers that will be assigned and the approximate Quarter the Project and/or Research Paper will be assigned



Describe how technology will be integrated into the course.

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Students can access the Prentice Hall website (address and codes are given in the textbook) for practice and interactive tutoring sessions for each lesson presented.

Students will use a scientific calculator throughout the course.

Will your midterm be a **Project, Research Paper** or **Test**?

Test

Will your final be a **Project, Research Paper** or **Test**?

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Test

If a NYS Assessment Exam or Regents Exam part of your course, how do you prepare for this test?

A review packet along with previous test questions will be used.

If this is an AP course, how do you prepare for this test?