**Algebra1 Test Study Notes**

**Test Date – Friday, 3 September 2010**

Rational Numbers

* Addition and Subtraction
  + When adding negative numbers, “leave change change” the signs
  + Subtraction is adding a negative number
  + When subtracting, the sign of the larger number is applied to the answer
  + Matrices, add or subtract elements in the same position
* Multiplication and Division
  + Multiplying or dividing two negatives results in a positive
  + Dividing fractions is the same as multiplying by the reciprocal
    - The reciprocal is the fraction with numerator and denominator switched
* Be prepared to evaluate an expression, given values for the variables
* Rational number operations may include fractions and decimals

Distributive Property

* Include the sign with the term being distributed
* Combine like terms after distributing to complete any problem
  + Like terms have the exact same variables
  + Like term’s variables have the same exponents

Properties

* Commutative, Associative, Identity - others on handout
  + Identify the property used in expressions
  + Simplify an expression using all the properties

Probability

* Theoretical Probability
  + Probability is the number of favorable outcomes divided by the total number of outcomes and is shown as a fraction, reduce when possible
  + Odds is determined by favorable to unfavorable, and is shown as a ratio with a colon
* Experimental Probability
  + Use the percent or measured outcome to predict probability of an event

Compound Probability

* The probability of two events is the multiplication of each events probability
* Dependent events must have their probability changed to reflect the first event

Review Questions

* The test will include two review questions from previous material