ALGEBRA II Readiness Review Topics

Students are advised to review these topics
• prior to taking the algebra II readiness test
  OR
• prior to signing up for Math 120, or Math 120SP, or Math 80AB, especially when their Algebra II readiness test score is below 70%.

The links below lead to select videos at the http://www.khanacademy.org site. Please watch each video and pause it when a problem is given. Attempt to solve the problem on your own, then play to video to check your work. It is recommended that you give yourself at least 5 minutes to work on a problem before watching its solution.

1. EXPONENTS
   a) Properties of positive exponents
   b) Negative and zero exponents
   c) Scientific notation

2. POLYNOMIALS
   a) Evaluate polynomials
   b) Add and Subtract polynomials
   c) Multiply polynomials
   d) Divide a polynomial by a monomial
   e) Divide polynomials

3. FACTORING POLYNOMIALS
   a) Common factors
   b) Grouping method
   c) Trinomials of the form $x^2+bx+c$
   d) Trinomials of the form $ax^2+bx+c$
   e) Difference of two squares

4. RATIONAL EXPRESSIONS
   a) Simplify Rational Expressions
   b) Add and Subtract Rational Expressions
   c) Multiply Rational Expressions
   d) Divide Rational Expressions

5. RADICALS
   a) Simplify Radicals
   b) Add and Subtract Radicals
   c) Multiply and Divide Radicals
   d) Rationalize denominators
6. SOLVING EQUATIONS
   a) Linear
   b) Quadratic using factoring
   c) Quadratic using the quadratic formula
   d) Rational
   e) Radical

7. SOLVING INEQUALITIES
   a) Linear

8. SOLVING LINEAR SYSTEMS
   a) The graphical method
   b) The substitution method
   c) The addition method

9. EQUATIONS OF STRAIGHT LINES
   a) The slope of a line
   b) The slope-intercept form of a line
   c) The point-slope form of a line
   d) Graphing lines by point-plotting
   e) Graphing lines by finding intercepts
   f) Graphing lines using the slope-intercept form

10. APPLICATION PROBLEMS
    a) Mixture problems
    b) Motion problems
    c) Age problems