**Khan Academy (khanacademy.org) Math Prep Checklist for Accuplacer**

Khan Academy is a valuable resource for learning and brushing up almost any concept you can think of, but where Khan Academy truly shines is in their Math videos. Each math lesson in Khan Academy allows students to go at their own pace by watching videos and doing practice problems.

If you want Khan Academy to track your progress, you can create an account using an email or Facebook account. There is even an app! An account is not necessary, since the videos are always available to anyone for free.

Below is a list of Algebra concepts you would be likely to see on a Quantitative Reasoning Accuplacer. The box on the lower left contains lessons for Statistics Review. Type any of these concepts into the Khan Academy search engine, and it should find multiple videos on the concept. The Math tutors at NC’s Tutoring Center have listed these concepts in the best learning order, so you can work through a curriculum at your own pace. If at any time you need extra help, you are always welcome to come into the Tutoring Center (117-119 Fallerius Hall) and work with a tutor.

**1: Exponents & Polynomials 3: Graphs, Systems, Roots, Proportions**

Squares, Cubes, & Exponents Systems of Equations

Powers of Integers Coefficients

Multiplying Monomials--Same Base The Substitution Method

Powers of Powers Solving Problems w/ Systems of Equations

Dividing Monomials--Same Base Systems of Equations w/ Fractional Coefficients

Fractions & Negative Exponents Solving Inequalities w/ Addition & Subtraction

Reducing Algebraic Fractions Solving Inequalities w/ Multiplication & Division

Subtracting Binomials Solving Problems with Inequalities

Simplifying Polynomials & Exponents Square Roots

Identifying Monomial Factors Equations with Squares

Multiply & Divide Polynomials by Binomials Cube Roots

Ratio & Proportion

**2: Functions & Graphs** **4: Factoring & Quadratic Equations**

Functions & Relations Square of the Sum / Difference of Two Terms

Graphing Ordered Pairs Factoring the Square of Sum / Difference

Linear Functions Quadratic Equations & Zero Product Property

Equations with Two Variables Quadratic Eq. & Perfect Square Trinomials

Graphing Solutions Product of the Sum & Difference of Two Terms

Graphing Linear Equations Factoring the Difference Between 2 Squares

Slope Product of 2 Binomials w/ a Common Term

The Slope Formula Factoring for 2 Binomials w/ a Common Term

Slope Intercept Forms Quad. Eq. & The Difference of Two Squares

Finding Intercepts Quadratic Equations & Factoring Trinomials

The FOIL Method

**Statistics Review:**

Statistics Intro: Mean, Median, & Mode

Analyzing Categorical Data

Reading and Interpreting Data

Summation Notation

Factoring for 2 Binomials w/ Like Terms

Quad. Eq. & Coefficients Other Than One

Writing & Solving Quadratic Equations

Completing the Square

The Quadratic Formula

Using the Quadratic Formula in Solving Problems