NKU MATHEMATICS PLACEMENT EXAM

College Readiness Kyote Exam
- This test is for students who have the equivalent of an ACT Math score of less than 19 and/or have never taken a college level math class. The College Readiness exam will assure placement into the appropriate level math course. Students will need to take a College Readiness Math exam before they register for courses.
- There are 31 multiple-choice questions. A score of 0-10 puts you into MAHD 090 and 11-21 into MAHD 095 and a score of 22-31 will allow a student to enroll in a mathematics or statistics course which has a math ACT requirement of a 19. Additionally, with a score of 22-31 a student is eligible to take the College Algebra Exam in an attempt to become eligible to enroll into MAT 109.
- This test is given in The Office of Testing Services, University Center 101. For more details and registration, please visit http://testing.nku.edu and click on “Placement Testing.” You may also contact Testing Services at (859) 572-6373 or testing@nku.edu.

College Algebra Kyote Exam
- This test is for students who need MAT 109 and have the equivalency of an ACT Math score of 19, 20 or 21, or a score of 22-31 on the College Readiness Exam, or earned a grade of C- or better in a 100 level math or statistics course.
- There are 25 multiple-choice questions. This test is not timed and you will receive your score upon completion of the exam.
- A score of 14 or higher is necessary to enroll into MAT 109.
- Photo identification must be provided prior to taking the placement exam. You may bring a non-graphing calculator or one will be provided.
- This test is given in the Mathematics and Statistics Department, Mathematics Education Psychology Center (MEP) 401, Monday-Friday, 9 am – 1 pm provided the department/university is open. For more details, contact the Math & Stats department at math@nku.edu or (859) 572-5377.

General Information
- Practice Tests can be found for both the College Readiness and College Algebra exams at www.kyote.org. No password is required and the same format is used as the actual test, but the questions will change.
- If a student would like to improve their ACT math score, contact Testing Services at (859) 572-6373 or testing@nku.edu.
- Additional study material can be found on the Mathematics & Statistics home page under Student Resources.

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<td>Mathematics 460 or higher</td>
<td>Algebra Domain 36 or higher</td>
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See reverse side for specific course objectives that may be covered on the Placement Exam
Specific Course Objectives that May Be Covered on the Placement Test

College Readiness Exam
testing@nku.edu
(Course Objectives):

- Evaluate numerical expressions involving signed numbers, positive integer exponents, order of operations and parentheses.
- Evaluate algebraic expressions at specified values of their variables using signed numbers, positive integer exponents, order of operations and parentheses.
- Perform arithmetic calculations involving fractions, decimals and percentages.
- Order fractions and decimals on a number line.
- Solve applied arithmetic problems using appropriate units, including problems involving percentage increase and decrease, rates and proportions.
- Solve simple geometry problems involving properties of rectangles and triangles.
- Solve simple coordinate geometry problems.
- Add and subtract polynomials.
- Multiply polynomials.
- Simplify algebraic expressions involving positive and negative integer exponents, and square roots.
- Factor a polynomial in one or more variables by factoring out its greatest common factor; factor a quadratic polynomial.
- Add, subtract and multiply simple rational expressions.
- Simplify a rational expression.
- Solve a linear equation.
- Solve a multivariable equation for one of its variables.
- Solve a linear inequality.
- Find the slope of a line given two points on the line or its equation; find the equation of a line given two points on the line, or a point on the line and the slope of the line.
- Graph a line given its equation; find the equation of a line given its graph.
- Solve a quadratic equation by factoring or by using the quadratic formula.
- Solve a system of two linear equations in two variables.

College Algebra Exam
math@nku.edu
(Course Objectives):

- Evaluate algebraic expressions at specified values of their variables using signed numbers, rational exponents, order of operations and parentheses.
- Add, subtract and multiply polynomials.
- Simplify algebraic expressions involving integer exponents.
- Simplify algebraic expressions involving square roots and cube roots.
- Factor a polynomial in one or more variables by factoring out its greatest common factor. Factor a trinomial. Factor the difference of squares.
- Add, subtract, multiply and divide rational expressions.
- Simplify a rational expression.
- Solve a linear equation.
- Solve a multivariable equation for one of its variables.
- Solve a linear inequality in one variable.
- Solve a quadratic equation.
- Solve an equation involving a radical, a rational or an absolute value expression.
- Solve a system of two linear equations in two variables.
- Solve problems that can be modeled using a linear or quadratic equation or expression.
- Solve geometry problems using the Pythagorean Theorem and the properties of similar triangles.
- Understand and apply the relationship between the properties of a graph of a line and its equation.
- Find the intercepts and the graph of a parabola given its equation. Find an equation of a parabola given its graph.
- Evaluate a function at a number in its domain. Find the domain of a rational function or the square root of a linear function.

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