

Algebra Readiness Test Syllabus

Placement out of the Math Preparatory modules and into Ma 103, 180, 220, or BA/Ma 320 requires a satisfactory understanding of the following topics:

Set Theory

Order of Operations

Polynomial Expressions

- Simplify
- Perform the four operations
- Factor – be sure you recognize and can factor
 - Perfect square trinomials
 - Difference of squares
 - Sum and difference of cubes
 - Polynomials that can be factored by grouping

Rational Expressions

- Simplify (with positive and negative integer exponents)
- Simplify complex rational expressions
- Perform the four operations

Radical Expressions

- Simplify
- Convert from radical to rational exponent form
- Perform the four operations

Complex Numbers

- Perform the four operations
- Simplify powers of i

Algebra: solve for x

Remember, in all cases a simplified expression has

- Fractions completely reduced
- No perfect squares under a square root (or perfect cubes under a $\sqrt[3]{\quad}$, etc.)
- No negative exponents
- No radicals (or fraction exponents or i s, which are also radicals) in the denominator
- Polynomials have all like terms combined