Trigonometry Placement Test Syllabus

Placement into Ma 125 requires a satisfactory understanding of the following topics:

Polynomial Expressions
- Simplify
- Perform the four operations
- Factor

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

Solve equations and inequalities of the following type
- Linear
- Absolute value
- Quadratic
- Rational
- Radical

Functions
- Linear in two variables: graph, slope, intercepts, write equation
- Quadratic: graph, vertex, intercepts, opens up or down, maximum or minimum value
- Polynomial of degree > 2: graph, possible rational zeros, number of positive and negative real zeros, end-tail behavior
- Rational: graph, domain, intercepts, asymptotes

Conics
- Circle: graph, center, radius
- Parabola: graph, vertex, focus, directrix
- Ellipse: graph, center, vertices, foci
- Hyperbola: graph, center, vertices, foci, asymptotes

Chapters P, 1-3, 8 of the following text address the topics covered by this syllabus:

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