

## **KYOTE College Algebra Placement Exam Standards**

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