Accuplacer - Elementary Algebra Content

The Elementary Algebra test measures a student's ability to perform basic algebraic operations and to solve problems that involve elementary algebraic concepts. Three content areas are measured with this test: (1 Integers and Rationals, (2 Algebraic Expressions, and (3 Equations, Inequalities, and Word Problems. The approximate distribution of these items is listed in the table below.

Students are administered 12 questions on this test. The Integers and Rational Numbers area involves computation with integers and negative rationals, the use of absolute values, and ordering. These questions test students' minimal skill levels. The Algebraic Expressions content area tests minimal skill levels through the evaluation of simple formulas and expressions, and adding and subtracting monomials and polynomials.

At all levels of skill, questions are provided involving multiplying and dividing monomials and polynomials, the evaluation of positive rational roots and exponents, simplifying algebraic fractions, and factoring.

The Equations content area involves the solution of equations, inequalities, and word problems. As with the Arithmetic Test, few questions from this category are presented to the student unless he or she demonstrates a high enough skill level. When a high degree of competence is indicated, questions from this category include solving linear equations and inequalities; the solution of quadratic equations by factoring; solving verbal problems presented in an algebraic context, including geometric reasoning and graphing; and the translation of written phrases into algebraic expressions.

Elementary Algebra Content Area	Approximate Percentage of Test*
Integers and Rationals	
Ordering	0 - 8
Operations with signed numbers	8 - 10
Absolute value	8 - 10
Algebraic Expressions	
Evaluating formulas and other algebraic expressions	0 - 8
Addition and subtraction of monomials and polynomials	0 - 8
Multiplication of monomials and polynomials	8 - 10
Positive rational roots and exponents	8 - 10
Squaring a binomial	8 - 10
Factoring difference of squares	8 - 10
Factoring $ax_2 + bx + c$ over the integers	8 - 10
Factoring polynomials that are not quadratics	0 - 8
Operations with algebraic fractions involving addition, subtraction, multiplication, and division	8 - 10

Division of monomials and polynomials including simplification of algebraic fractions	8 – 10
Equations, Inequalities, and Word Problems	8 - 17
Solving linear equations and inequalities	0 - 8
Systems of linear equations	0 - 8
Quadratic equations solution by factoring Translating written phrases or sentences into algebraic expressions or equations	8 - 10
Solving verbal problems in an algebraic context including geometric reasoning	8 - 10
Graphing	0 - 8

*Percentages do not sum to 100 due to the ability of some items to meet multiple content requirements.