

ACCUPLACER - Concepts Tested

Arithmetic Test *

It assesses your Math 091 (Basic Mathematics) and Math 093 (Pre-Algebra) skills. 17 questions are administered on the Arithmetic Test divided into 3 types containing the following concepts:

1. Operations with whole numbers and fractions. Topics included are addition, subtraction, multiplication, division, recognizing equivalent fractions and mixed numbers, and estimating.
2. Operations with decimals and percents. Topics included are addition, subtraction, multiplication, division with decimals. Percent problems, recognition of decimals, fraction and percent equivalencies, and problems involving estimation are also given.
3. Applications and problem solving. Topics included are rate, percent, and measurement problems, simple geometry problems, and distribution of a quantity into its fractional parts.

Questions from all three categories are always presented to the student although the number of questions from each category varies with the student's skill level. For example, if the student's responses show minimal arithmetic skills, presenting too many applications problems is pointless. On the other hand, a student exhibiting good skills with whole numbers and fractions will be presented with more of these types of problems. Thus, the proportion of questions in the various categories will automatically vary according to the student's responses.

Whole numbers and fractions	31 - 44% of test
Decimals and percents	31 - 38% of test
Applications and problem solving	25 - 31% of test

* The Math 091 and Math 093 Diagnostic Tests assess some of the same concepts!

Elementary Algebra Test *

It assesses your skills from Math 093 (Pre-Algebra) through Math 096 (Intermediate Algebra). 12 questions are administered on the Elementary Algebra Test divided into 3 types containing the following concepts:

1. Operations with integers and rational numbers, computation with integers and negative rational numbers, the use of absolute values, and ordering. These questions test minimal skill levels of the student.
2. Operations with algebraic expressions tests minimal skill levels using evaluation of simple formulas and expressions, and adding and subtracting monomials and polynomials. At all skill levels, questions are provided involving multiplying and dividing monomials and polynomials, the evaluation of positive rational roots and exponents, simplifying algebraic fractions and factoring.
3. 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 shows skill in this area. 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.

Signed Numbers and rational numbers	8 - 17% of test
Algebraic Expressions	42 - 67% of test
Equations, inequalities, and word problems	17 - 50% of test

* The Math 095, 096, and 097 Diagnostic Tests assess some of the same concepts!

College-Level Mathematics Test *

It assesses your skills from Math 096 (Intermediate algebra) through Math 181 (Calculus). 20 questions are administered on the College-Level Mathematics Test divided into 6 types containing the following concepts:

1. Algebraic operations including simplifying rational algebraic expressions, factoring and expanding polynomials, and manipulating roots and exponents.
2. Solutions of equations and inequalities including the solution of linear and quadratic equations and inequalities, systems of equations, and other algebraic equations.
3. Coordinate geometry including plane geometry, the coordinate plane, straight lines, conics, sets of points in the plane, and graphs of algebraic functions.
4. Applications and other algebra topics including complex numbers, series and sequences, determinants, permutations and combinations, factorials, and word problems.
5. Functions including questions involving polynomial, algebraic, exponential, and logarithmic, and trigonometric functions.

Algebraic operations	20% of test
Solutions of equations and inequalities	15% of test
Coordinate Geometry	15% of test
Functions	20% of test
Trigonometry	20% of test
Applications and other algebra topics	10% of test

* The Math 096 through Math 181 Diagnostic Tests assess some of the same concepts!