**ACCUPLACER MATHEMATICS PLACEMENT TEST**

**ON-LINE VIDEO PRE/REVIEW**

Almost all students in the Connecticut Community College System must take the ACCUPLACER test to determine their correct placement into Mathematics classes.

### To help you review for the test more effectively, we have hyper-linked important concepts that will appear on the test with on-line instructional videos from Khan Academy. [Khan Academy](http://www.khanacademy.org/) is a free, not-for-profit 501(c)(3) whose mission is providing a world-class education to anyone, anywhere.

### If, after watching a video, you feel that you need more practice to understand a concept, there are many websites offering practice exercises. St. Louis Community College provides a good source for ACCUPLACER [Arithmetic Test](http://www.stlcc.edu/Document_Library/Accuplacer%20Study%20Guide%20arithmetic%20review.pdf) and [Elementary Algebra](http://users.stlcc.edu/Departments/fvmath/Accuplacer/Elementary%20Algebra%20Review.pdf) review exercises.

If you have further questions about Accuplacer Math Test, want to report a broken link, or have suggestions about how to improve this resource, please contact Rick Boger-Hawkins at Asnuntuck Community College.

After you have used this ACCUPLACER review, please take a few minutes to answer a very short survey to help us gauge this review’s effectiveness. Your responses are totally confidential.

Best of luck on the ACCUPLACER Math Tests!

1. **ARITHMETIC TEST**

The Arithmetic Section of the ACCPLACER test measures your ability to perform basic arithmetic operations and to solve problems that involve fundamental arithmetic concepts.

The ACCUPLACER tests three types of Arithmetic questions: 1) Operations with Whole Numbers and Fractions; 2) Operations with Decimals and Percents; and 3) Operations with Decimals and Percents.

1. **Operations with Whole Numbers, Fractions, Number Lines, and Square Roots**
* **Whole Numbers**
	+ [Adding Whole Numbers](http://www.khanacademy.org/video/adding-whole-numbers-and-applications-1?playlist=Developmental%20Math)
* [Subtracting Whole Numbers 1](http://www.khanacademy.org/video/basic-subtraction?playlist=Arithmetic)
* [Subtracting Whole Numbers 2](http://www.khanacademy.org/video/subtraction-2?playlist=Arithmetic)
* [Subtracting Whole Numbers 3](http://www.khanacademy.org/video/subtraction-3---introduction-to-borrowing-or-regrouping?playlist=Arithmetic)
* [Multiplying Whole Numbers 1](http://www.khanacademy.org/video/multiplying-whole-numbers-and-applications-1?playlist=Developmental%20Math)
* [Multiplying Whole Numbers 2](http://www.khanacademy.org/video/multiplying-whole-numbers-and-applications-2?playlist=Developmental%20Math)
* [Dividing Whole Numbers 1](http://www.khanacademy.org/video/division-1?playlist=Arithmetic)
* [Dividing Whole Numbers 2](http://www.khanacademy.org/video/division-2?playlist=Arithmetic)
* [Dividing Whole Numbers 3](http://www.khanacademy.org/video/division-3--more-long-division-and-remainder-examples?playlist=Arithmetic)
* [Dividing Whole Numbers 4](http://www.khanacademy.org/video/level-4-division?playlist=Arithmetic)
* [Rounding Whole Numbers 1](http://www.khanacademy.org/video/rounding-whole-numbers-1?playlist=Developmental%20Math)
* [Rounding Whole Numbers 2](http://www.khanacademy.org/video/rounding-whole-numbers-2?playlist=Developmental%20Math)
* [Rounding Whole Numbers 3](http://www.khanacademy.org/video/rounding-whole-numbers-3?playlist=Developmental%20Math)
* **Fractions**
	+ [Adding Fractions with *like* Denominators](http://www.khanacademy.org/video/adding-fractions-with-like-denominators?playlist=Developmental%20Math)
	+ [Adding Fractions with *unlike* Denominators](http://www.khanacademy.org/video/adding-fractions-with-unlike-denominators?playlist=Developmental%20Math)
	+ [Adding Mixed Numbers with *like* Denominators](http://www.khanacademy.org/video/adding-mixed-numbers?playlist=Developmental%20Math)
	+ [Adding Mixed Numbers with *unlike* Denominators](http://www.khanacademy.org/video/adding-mixed-numbers-with-unlike-denominators?playlist=Developmental%20Math)
	+ [Subtracting Fractions](http://www.khanacademy.org/video/subtracting--fractions?playlist=Developmental%20Math)
	+ [Subtracting Mixed Numbers](http://www.khanacademy.org/video/subtracting-mixed-numbers?playlist=Developmental%20Math)
	+ [Multiplying Fractions](http://www.khanacademy.org/video/multiplying-fractions?playlist=Developmental%20Math)
	+ [Multiplying Mixed Numbers](http://www.khanacademy.org/video/multiplying--mixed-numbers?playlist=Developmental%20Math)
	+ [Dividing Fractions 1](http://www.khanacademy.org/video/dividing-fractions?playlist=Developmental%20Math)
	+ [Dividing Fractions 2](http://www.khanacademy.org/video/dividing-mixed-numbers-and-fractions?playlist=Developmental%20Math)
	+ [Dividing Fractions 3](http://www.khanacademy.org/video/dividing-fractions-word-problem?playlist=Developmental%20Math)
	+ [Equivalent Fractions](http://www.khanacademy.org/video/equivalent-fractions?playlist=Developmental%20Math)
* **Number Lines and Square Roots**
* [Number Lines](http://www.khanacademy.org/video/points-on-a-number-line?playlist=Developmental%20Math)
* [Evaluating Square Roots](http://www.khanacademy.org/video/understanding-square-roots?playlist=Developmental%20Math)
1. **Operations with Decimals and Percents**
* **Decimals**
	+ [Recognizing Decimals](http://www.khanacademy.org/video/decimal-place-value?playlist=Developmental%20Math)
	+ [Adding Decimals](http://www.khanacademy.org/video/adding-decimals?playlist=Developmental%20Math)
	+ [Subtracting Decimals](http://www.khanacademy.org/video/subtracting-decimals?playlist=Developmental%20Math)
	+ [Multiplying Decimals](http://www.khanacademy.org/video/multiplying-decimals?playlist=Developmental%20Math)
	+ [Dividing Decimals](http://www.khanacademy.org/video/dividing-decimals?playlist=Developmental%20Math)
	+ [Estimating Decimals](http://www.khanacademy.org/video/estimation-with-decimals?playlist=Developmental%20Math)
* **Percents**
* [Solving Percent Problems 1](http://www.khanacademy.org/video/describing-the-meaning-of-percent?playlist=Developmental%20Math)
* [Solving Percent Problems 2](http://www.khanacademy.org/video/describing-the-meaning-of-percent-2?playlist=Developmental%20Math)
* [Solving Percent Problems 3](http://www.khanacademy.org/video/solving-percent-problems?playlist=Developmental%20Math)
* [Solving Percent Problems 4](http://www.khanacademy.org/video/solving-percent-problems-2?playlist=Developmental%20Math)
* [Solving Percent Problems 5](http://www.khanacademy.org/video/solving-percent-problems-3?playlist=Developmental%20Math)
* [Solving Percent Problems 6](http://www.khanacademy.org/video/more-percent-problems?playlist=Algebra)
* [Solving Percent Problems 7](http://www.khanacademy.org/video/more-percent-problems?playlist=Algebra)
	+ [Equating Percents and Fractions 1](http://www.khanacademy.org/video/representing-a-number-as-a-decimal--percent--and-fraction?playlist=Developmental%20Math)
	+ [Equating Percents and Fractions 2](http://www.khanacademy.org/video/representing-a-number-as-a-decimal--percent--and-fraction-2?playlist=Developmental%20Math)
1. **Applications and Problem Solving**
* **Rates**
* [Simplifying Rates and Ratios 1](http://www.khanacademy.org/video/simplifying-rates-and-ratios?playlist=Developmental%20Math)
* [Simplifying Rates and Ratios 2](http://www.khanacademy.org/video/finding-unit-rates?playlist=Developmental%20Math)
* **Simple Geometry**
	+ [Angles 1](http://www.khanacademy.org/video/introduction-to-angles?playlist=Geometry)
	+ [Angles 2](http://www.khanacademy.org/video/angles--part-2?playlist=Geometry)
	+ [Angles 3](http://www.khanacademy.org/video/angles--part-3?playlist=Geometry)
* [Area and Perimeter](http://www.khanacademy.org/video/area-and-perimeter?playlist=Geometry)
* **Circles**
	+ [Calculating a Circle’s Radius](http://www.khanacademy.org/video/circles--radius--diameter-and-circumference?playlist=Geometry)
	+ [Calculating a Circle’s Area](http://www.khanacademy.org/video/area-of-a-circle?playlist=Geometry)
* **Triangles**
	+ [Calculating a Triangle’s Missing Side](http://www.khanacademy.org/video/45-45-90-triangles?playlist=Geometry)
* **Pythagorean Theorem**
	+ [Using the Pythagorean Theorem 1](http://www.khanacademy.org/video/the-pythagorean-theorem?playlist=Geometry)
	+ [Using the Pythagorean Theorem 2](http://www.khanacademy.org/video/pythagorean-theorem-ii?playlist=Geometry)
1. **ELEMENTARY ALGEBRA TEST**

The Elementary Algebra Section of the ACCPLACER test measures your ability to perform basic algebraic manipulations and to solve problems by applying algebraic concepts.

The ACCUPLACER tests three types of Elementary Algebra questions: 1) Operations with Integers and Rational Numbers; 2) Operations with Algebraic Expressions using Evaluation of Simple Formulas and Expressions, and adding and subtracting Monomials and Polynomials; 3) Solution of Equations, Inequalities, and Word Problems.

1. **Operations with Integers and Rational Numbers**
* **Integers**
	+ [Adding/Subtracting Integers](http://www.khanacademy.org/video/adding-subtracting-negative-numbers?playlist=Pre-algebra)
	+ [Multiplying and Dividing Integers](http://www.khanacademy.org/video/multiplying-and-dividing-negative-numbers?playlist=Pre-algebra)
* **Rational Numbers**
	+ [Adding Rational Numbers](http://www.khanacademy.org/video/addition-of-rational--numbers?playlist=ck12.org%20Algebra%201%20Examples)
	+ [Subtracting Rational Numbers](http://www.khanacademy.org/video/subraction-of-rational-numbers?playlist=ck12.org%20Algebra%201%20Examples)
	+ [Dividing Rational Numbers](http://www.khanacademy.org/video/division-of-rational-numbers?playlist=ck12.org%20Algebra%201%20Examples)
	+ [Multiplying Rational Numbers](http://www.khanacademy.org/video/multiplication-of-rational-numbers?playlist=ck12.org%20Algebra%201%20Examples)
* **Absolute Value**
* [Evaluating Absolute Values](http://www.khanacademy.org/video/absolute-value-1?playlist=Algebra%20I%20Worked%20Examples)
* **Order of Operations**
	+ [Simplifying Expressions 1](http://www.khanacademy.org/video/order-of-operations?playlist=ck12.org%20Algebra%201%20Examples)
	+ [Simplifying Expressions 2](http://www.khanacademy.org/math/trigonometry/polynomial_and_rational/simplifying-rational-expressions/v/simplifying-rational-expressions-2)
1. **Operations with Algebraic Expressions using Evaluation of Simple Formulas and Expressions, and adding and subtracting Monomials and Polynomials**
* **Monomials**
	+ [Multiplying and dividing Monomials 1](http://www.khanacademy.org/video/multiplying-and-dividing--monomials-1?playlist=Algebra%20I%20Worked%20Examples)
	+ [Multiplying and dividing Monomials 2](http://www.khanacademy.org/video/multiplying-and-dividing-monomials-2?playlist=Algebra%20I%20Worked%20Examples)
	+ [Multiplying and dividing Monomials 3](http://www.khanacademy.org/video/multiplying-and-dividing-monomials-3?playlist=Algebra%20I%20Worked%20Examples)
* **Polynomials**
	+ [Multiplying Polynomials 1](http://www.khanacademy.org/video/multiplying-polynomials1?playlist=Algebra%20I%20Worked%20Examples)
	+ [Multiplying Polynomials 2](http://www.khanacademy.org/video/multiplying-polynomials-2?playlist=Algebra%20I%20Worked%20Examples)
	+ [Multiplying Polynomials 3](http://www.khanacademy.org/video/multiplying-polynomials-3?playlist=Algebra%20I%20Worked%20Examples)
	+ [Adding and Subtracting Polynomials 1](http://www.khanacademy.org/video/adding-and-subtracting-polynomials-1?playlist=Algebra%20I%20Worked%20Examples)
	+ [Adding and Subtracting Polynomials 2](http://www.khanacademy.org/video/adding-and-subtracting-polynomials-2?playlist=Algebra%20I%20Worked%20Examples)
	+ [Adding and Subtracting Polynomials 3](http://www.khanacademy.org/video/adding-and-subtracting-polynomials-3?playlist=Algebra%20I%20Worked%20Examples)
* **Positive Rational Roots and Exponents**
	+ [Evaluating Positive Rational Roots and Exponents](http://www.khanacademy.org/video/level-3-exponents?playlist=Pre-algebra)
* **Algebraic Expressions and Formulas**
	+ [Simplifying Algebraic Expressions](http://www.khanacademy.org/video/ca-algebra-i--simplifying-expressions?playlist=California%20Standards%20Test%3A%20Algebra%20I)
	+ [Factoring and the Distributive Property 1](http://www.khanacademy.org/video/factoring-and-the-distributive-property?playlist=Algebra%20I%20Worked%20Examples)
	+ [Factoring and the Distributive Property 2](http://www.khanacademy.org/video/factoring-and-the-distributive-property-2?playlist=Algebra%20I%20Worked%20Examples)
	+ [Factoring and the Distributive Property 3](http://www.khanacademy.org/video/factoring-and-the-distributive-property-3?playlist=Algebra%20I%20Worked%20Examples)

1. **Solution of Equations, Inequalities and Word Problems**
* **Linear Equations**
* [Solving Linear Equations 1](http://www.khanacademy.org/video/algebra--linear-equations-1?playlist=Old%20Algebra)
* [Solving Linear Equations 2](http://www.khanacademy.org/video/algebra--linear-equations-2?playlist=Old%20Algebra)
* [Solving Linear Equations 3](http://www.khanacademy.org/video/algebra--linear-equations-3?playlist=Old%20Algebra)
* [Solving Linear Equations 4](http://www.khanacademy.org/video/algebra--linear-equations-4?playlist=Algebra)
* **Inequalities**
* [Inequalities](https://www.khanacademy.org/math/algebra/linear_inequalities/inequalities/v/inequalities)
* [Solving Inequalities](http://www.khanacademy.org/math/algebra/linear_inequalities/inequalities/v/solving-inequalities)
* **Quadratic Equations**
* [Introduction to the Quadratic Equation](https://www.khanacademy.org/math/algebra/quadratics/quadratic_odds_ends/v/introduction-to-the-quadratic-equation)
* [Using the Quadratic Equation 1](http://www.khanacademy.org/math/algebra/quadratics/quadratic_formula/v/quadratic-formula-1)
* [Using the Quadratic Equation 2](http://www.khanacademy.org/math/algebra/quadratics/quadratic_formula/v/quadratic-formula-2)
* [Using the Quadratic Equation 3](http://www.khanacademy.org/math/algebra/quadratics/quadratic_formula/v/quadratic-formula-3)
* [Solving Quadratic Equations by Graphing](https://www.khanacademy.org/math/trigonometry/polynomial_and_rational/solving_graphing_quadratics/v/graphs-of-quadratic-functions)
* **Verbal Problems presented in an Algebraic Context (Including Geometric Reasoning and Graphing)**

**Graphs**

* + [Graphing Systems of Inequalities 1](http://www.khanacademy.org/math/trigonometry/graphs/graphing_inequalities/v/graphing-inequalities)
	+ [Graphing Systems of Inequalities 2](http://www.khanacademy.org/video/graphing-systems-of-inequalities-2?playlist=Algebra%20I%20Worked%20Examples)
	+ [Graphing Systems of Inequalities 3](http://www.khanacademy.org/math/trigonometry/graphs/graphing_inequalities/v/graphing-linear-inequalities-in-two-variables-3)

**Algebra Word Problems**

* + [Working Algebra Word Problems 2](http://www.khanacademy.org/video/problem-solving-word-problems-2?playlist=ck12.org%20Algebra%201%20Examples)
	+ [Working Algebra Word Problems 3](http://www.khanacademy.org/video/word-problem-solving-3?playlist=ck12.org%20Algebra%201%20Examples)
	+ [Working Algebra Word Problems 4](http://www.khanacademy.org/video/word-problem-solving-4?playlist=ck12.org%20Algebra%201%20Examples)
	+ [Working Algebra Word Problems 5](http://www.khanacademy.org/video/word-problem-solving--exponential-growth-and-decay?playlist=ck12.org%20Algebra%201%20Examples)

**If you have not already, please take a few minutes to answer a very short survey to help us gauge this review’s effectiveness.**

**Your response is totally confidential.**

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