



Math Accuplacer Score and Study Guide

What is the Math Accuplacer?

The Accuplacer is a test that measures your readiness for college-level math courses. The test has a score range of 200–300 and covers five main topics: arithmetic, quantitative reasoning, algebra, statistics, and advanced algebra and functions.

Students will begin by answering questions in the **Quantitative Reasoning, Algebra, and Statistics** portion of the exam, which can then be followed by other questions depending on the score the student receives. Students who score 236 or below on the QAS section will be introduced to the Arithmetic section of the exam. Students who score 276 or above on the QAS section will be introduced to the Advanced Algebra section.

This computer-based test is **untimed** and contains **20 multiple-choice questions**. The exam is also **adaptive**, meaning the difficulty of the questions changes based on the test taker's previous answers. The tables in the next section outline the content covered on the exam.

Your score on the test will show what math skills you have and what areas you need to improve. All three tests have a score range of 200-300, divided into five score bands. Each score band reflects a different level of understanding of basic mathematical concepts and operations. The higher your score band, the more prepared you are for math courses that require arithmetic, quantitative reasoning, or advanced algebra skills. ECC then uses these score bands to place students into a wide array of courses, as shown below.

Test Score		Available Class(es)			
Arithmetic 200-259		PreAlgebra			
Arithmetic 260-300	Quantitative Reasoning 237-249	Fundamental Concepts in Math		Business Math	
Quantitative Reasoning 250-275	Advanced Algebra 200-236	Intermediate Algebra	Math for Performing Arts	Contemporary Math	Statistics
Advanced Algebra 237-275		College Algebra		Trigonometry	
Advanced Algebra 276-300		Calculus 1			

What is on the Test?

Quantitative Reasoning, Algebra, and Statistics

The QAS test covers a wide range of topics including rational numbers, proportional relationships, exponents, linear expressions and equations, geometry, probability calculations, and graphical displays of data. Students will be evaluated on their ability to simplify, solve, and interpret linear applications and graphs, which involve manipulating variables and constants. In this section, the test will focus on geometry concepts such as area, perimeter, and volume of basic 2D shapes like triangles, squares, rectangles, and circles and 3D shapes like spheres, prisms, and cylinders.

Content Area	% of Questions
Ratios and Proportions	15-20% ($\approx$ 3-4 Questions)
Linear Equations	10-20% ($\approx$ 2-4 Questions)
Linear Applications and Graphs	10-20% ($\approx$ 2-4 Questions)
Exponents	10-15% ($\approx$ 2-3 Questions)
Algebraic Expressions	10-15% ($\approx$ 2-3 Questions)
Rational Numbers	5-15% ($\approx$ 1-3 Questions)
Probability	5-15% ($\approx$ 1-3 Questions)
Descriptive Statistics	5-15% ($\approx$ 1-3 Questions)
Basic Geometry	5-10% ($\approx$ 1-2 Questions)
Algebraic Geometry	5-10% ($\approx$ 1-2 Questions)

Arithmetic

The Arithmetic test focuses on computation, order of operations (PEMDAS), estimating and rounding, comparing and ordering numbers, and recognizing equivalent values. Students will be assessed on how well they can perform operations like addition, subtraction, multiplication, and division with whole numbers, fractions, decimals, and percentages. Students will also encounter questions comparing and converting between fractions, decimals, and percentages.

Content Area	% of Questions
Whole Numbers	15-25% ($\approx$ 3-5 Questions)
Fractions	15-25% ($\approx$ 3-5 Questions)
Decimals	15-25% ($\approx$ 3-5 Questions)
Percentages	15-25% ($\approx$ 3-5 Questions)
Comparing Numbers	15-25% ($\approx$ 3-5 Questions)

Advanced Algebra

The Advanced Algebra test covers a wide range of upper-level mathematical subjects. Students will be expected to factor and expand linear expressions and equations. Students will encounter operations involving quadratic, radical, rational, polynomial, exponential, and logarithmic equations. The test may also include basic trigonometric functions such as sine, cosine, and tangent and their inverses.

Content Area	% of Questions
Functions	10-20% ($\approx$ 2-4 Questions)
Linear Equations	10-15% ($\approx$ 2-3 Questions)
Linear Applications and Graphs	10-15% ($\approx$ 2-3 Questions)
Quadratics	10-15% ($\approx$ 2-3 Questions)
Radical and Rational Equations	5-15% ($\approx$ 1-3 Questions)
Polynomial Equations	5-15% ($\approx$ 1-3 Questions)
Exponential and Logarithmic Equations	5-15% ($\approx$ 1-3 Questions)
Trigonometry	5-15% ($\approx$ 1-3 Questions)
Factoring	5-10% ($\approx$ 1-2 Questions)
Algebra 1 Geometry	5-10% ($\approx$ 1-2 Questions)
Algebra 2 Geometry	5-10% ($\approx$ 1-2 Questions)

I've taken the test and gotten a score. What does my score mean? What should I study to improve?

Arithmetic

200-259

- This score range indicates that you need to develop your **basic math skills**, and you will be placed into **pre-algebra**.
- You should focus on practicing with simple one to two-step questions with whole numbers, fractions, and decimals.
- You should also review the types of questions that are asked on the Accuplacer Arithmetic test, such as:
 - Operations with positive whole numbers
 - Converting fractions to decimals
 - Identifying decimal values
 - Rounding decimal values to a set place
 - Simplifying fractions
 - Ordering values from least to greatest
 - Operations with decimals and fractions, including mixed numbers

- Converting from mixed numbers to improper fractions and vice versa
- One-step word problems with whole numbers
- Multistep problems with decimals and whole numbers
- Finding a common denominator
- Cross multiplying
- Operations involving fractions
- Solving “_ percent of _ is _” problems
- Some resources that can help you are:
 - [The Accuplacer sample questions](#), which can give you an idea of what to expect on the test and how to answer them.
 - [The Accuplacer Learning Locator](#), which can give you videos and practice questions based on your level. The codes for this score range are ARIT01 (200-236), ARIT02 (237-249), and ARIT03 (250-262).
 - [The Mometrix Accuplacer Arithmetic and QAS Practice Test](#), which offers a full-length practice test with detailed explanations.
 - [Khan Academy](#), which offers videos and practice questions based on a search using keywords.
 - [Mathhelp.com](#), which offers free online courses covering Accuplacer materials.
 - [MyOpenMath](#), which offers a free online self-study course in Pre-Algebra.

260-300

- This score range indicates that you have **proficient math skills**, but you may need to further improve your basic math skills. You will be able to choose either the **fundamental concepts in math** or **business math** classes.
- You should focus on practicing with more complex questions involving whole numbers, fractions, decimals, and percentages.
- You should also review the types of questions that are asked on the Accuplacer Arithmetic test, such as:
 - Multistep problems with decimals and whole numbers
 - Finding a common denominator
 - Cross multiplying
 - Operations involving fractions
 - Solving “_ percent of _ is _” problems
 - Simplifying expressions with decimals and whole numbers using PEMDAS
 - Solving complex problems involving fractions
 - Solving single-step word problems involving percentages
 - Solving problems involving converting fractions to decimals and rounding
 - Simplifying expressions with percentages and fractions using PEMDAS, including improper fractions and mixed numbers
 - Solving multistep word problems using percentages

- Some resources that can help you are:
 - [The Accuplacer sample questions](#), which can give you an idea of what to expect on the test and how to answer them.
 - [The Accuplacer Learning Locator](#), which can give you videos and practice worksheets based on your level. The codes for this score range are ARIT03 (250-262), ARIT04 (263-275), and ARIT05 (276-300).
 - [The Mometrix Accuplacer Arithmetic and QAS Practice Test](#), which offers a full-length practice test with detailed explanations.
 - [Khan Academy](#), which offers videos and practice questions based on a search using keywords.
 - [Mathhelp.com](#), which offers free online courses covering Accuplacer materials.
 - [MyOpenMath](#), which offers a free online self-study course in Pre-Algebra.

Quantitative Reasoning, Algebra, and Statistics

200-236

- This score range indicates that you may need to work on your **basic math skills**, so you will be placed according to your score in the **Arithmetic section**.
- You should focus on practicing with simple one to two-step questions with negative numbers, reading graphs in your local newspaper or news articles and familiarizing yourself with the basic parts of the xy-plane.
- You should also review the types of questions that are asked on the Accuplacer QAS test, such as:
 - Adding and subtracting negative and positive numbers
 - Multiplying and dividing negative and positive numbers
 - Interpreting graphs like bar charts, pie charts, and dot plots
 - Identifying the four quadrants
 - Locating coordinate points on the xy-plane
 - Identifying the x-axis and y-axis
- Some resources that can help you are:
 - [The Accuplacer sample questions](#), which can give you an idea of what to expect on the test and how to answer them.
 - [The Accuplacer Learning Locator](#), which can give you videos and practice questions based on your level. The code for this score range is QRS01.
 - [The Mometrix Accuplacer Arithmetic and QAS Practice Test](#), which offers a full-length practice test with detailed explanations.
 - [Khan Academy](#), which offers videos and practice questions based on a search using keywords.
 - [Mathhelp.com](#), which offers free online courses covering Accuplacer materials.
 - [MyOpenMath](#), which offers a free online self-study in Pre-Algebra

237-249

- This score range indicates that you have **good math skills** and are ready for developmental courses such as **fundamental concepts in math** and **business math**.
- You should focus on familiarizing yourself with the pieces of a linear equation or inequality, the “plug and chug” method, and converting from one unit to another.
- You should also review the types of questions that are asked on the Accuplacer QAS test, such as:
 - Slope-intercept, point slope, and standard forms of a linear equation
 - Finding the slope, y-intercept, and x-intercept of a line
 - Less than, greater than, less than or equal to, greater than or equal to, and their symbols
 - For a linear equation with two variables, given one of those variables, finding the other
 - Solving two-step linear equations and linear inequalities
 - Simplifying rational (fractions) and radical (roots) expressions with positive and negative numbers
 - Solving one-step problems involving ratios and proportions or unit conversions
- Some resources that can help you are:
 - [The Accuplacer sample questions](#), which can give you an idea of what to expect on the test and how to answer them.
 - [The Accuplacer Learning Locator](#), which can give you videos and practice questions based on your level. The code for this score range is QRS02.
 - [The Mometrix Accuplacer Arithmetic and QAS Practice Test](#), which offers a full-length practice test with detailed explanations.
 - [Khan Academy](#), which offers videos and practice questions based on a search using keywords.
 - [Mathhelp.com](#), which offers free online courses covering Accuplacer materials.
 - [MyOpenMath](#), which offers a free online self-study course on Pre-Algebra

250-275

- This score range indicates that you have **adequate algebra skills** and are ready for college-level math courses such as **math for performing arts, statistics, intermediate algebra**, and **contemporary math**.
- You should focus on familiarizing yourself with creating and solving complex problems involving systems of equations, fractions, word problems, and analyzing data.
- You should also review the types of questions that are asked on the Accuplacer QAS test, such as:
 - Solving systems of equations using elimination or substitution
 - Interpreting word problems to create a system of linear equations

- Using conversions in multistep problems
- Multistep conversions through dimensional analysis or ratios and proportions
- Reading a word problem or looking at a graph and recognizing it as a linear equation to solve
- Finding the slope and y-intercept of parallel lines
- Evaluating exponent rules, including negative and fractional exponents, multiplying and dividing exponents, and taking an exponent to another exponential power
- Calculate conditional probability for simple problems
- Interpret the y-intercept and slope in words within a context
- Some resources that can help you are:
 - [The Accuplacer sample questions](#), which can give you an idea of what to expect on the test and how to answer them.
 - [The Accuplacer Learning Locator](#), which can give you videos and practice questions based on your level. The codes for this score range are QRS03 (250-262) and QRS04 (263-275).
 - [The Mometrix Accuplacer Arithmetic and QAS Practice Test](#), which offers a full-length practice test with detailed explanations.
 - [Khan Academy](#), which offers videos and practice questions based on a search using keywords.
 - [Mathhelp.com](#), which offers free online courses covering Accuplacer materials.
 - [MyOpenMath](#), which offers a free online self-study course in Beginning and Intermediate Algebra.

276-300

- This score range indicates you have **excellent algebra skills** and can take the **Advanced Algebra section** of the Accuplacer, but you must improve your algebra skills further to test into college algebra or higher.
- You should focus on a broad spectrum of topics found in algebra 1, algebra 2, or geometry to move into advanced algebra questions.
- You should also review the types of questions that are asked on the Accuplacer QAS test, such as:
 - Finding the slope and y-intercept of perpendicular lines
 - Plugging in values into a nonlinear function to solve for an unknown variable
 - Comparing the mean and median of two sets of data
 - Finding the area and perimeter of basic 2D shapes such as a square, rectangle, circle, and triangle.
 - Finding the volume of basic 3D shapes such as a prism, cylinder, cone, or pyramid
 - Solving linear equations involving absolute value
 - Factoring methods and FOIL

- Some resources that can help you are:
 - [The Accuplacer sample questions](#), which can give you an idea of what to expect on the test and how to answer them.
 - [The Accuplacer Learning Locator](#), which can give you videos and practice questions based on your level. The code for this score range is QRS05.
 - [The Mometrix Accuplacer Arithmetic and QAS Practice Test](#), which offers a full-length practice test with detailed explanations.
 - [Khan Academy](#), which offers videos and practice questions based on a search using keywords.
 - [Mathhelp.com](#), which offers free online courses covering Accuplacer materials.
 - [MyOpenMath](#), which offers a free online self-study course in Pre Calculus 1.

Advanced Algebra and Functions

200-236

- This score range indicates that you have **excellent algebra skills** and are ready for college-level math courses such as **math for performing arts, statistics, intermediate algebra**, and **contemporary math**.
- You should focus on maintaining your current algebra skills and expanding your knowledge of advanced topics.
- You should also review the types of questions that are asked on the Accuplacer AAF test, such as:
 - Interpreting word problems with linear functions to solve them
 - Applying exponent rules to simplify complex expressions
 - Solve quadratic equations by factoring or using the quadratic formula
 - Interpreting word problems with exponential functions
 - Determine the end behavior of a function based on the integer constants
- Some resources that can help you are:
 - [The Accuplacer sample questions](#), which can give you an idea of what to expect on the test and how to answer them.
 - [The Accuplacer Learning Locator](#), which can give you videos and practice questions based on your level. The code for this score range is AAF01.
 - [The Mometrix Accuplacer AAF Practice Test](#), which offers a full-length practice test with detailed explanations.
 - [Khan Academy](#), which offers videos and practice questions based on a search using keywords.
 - [Mathhelp.com](#), which offers free online courses covering Accuplacer materials.
 - [MyOpenMath](#), which offers a free online self-study in Pre Calculus 1.

237-275

- This score range indicates that you have **excellent algebra skills** and are ready for upper-level college math courses such as **college algebra** and **trigonometry**.
- You should focus on expanding your precalculus knowledge and your understanding of trigonometric functions.
- You should also review the types of questions that are asked on the Accuplacer AAF test, such as:
 - Solving linear equation systems in $ax + by = cx + dy$ form with integer coefficients
 - Determining the relationship between tables and nonlinear equations, including quadratic relationships
 - Solving rational and radical equations
 - Transformations of equations on a graph
 - Using properties of triangles to solve problems
 - Use trigonometric ratios such as SOH CAH TOA
 - Rewriting and simplifying rational and exponential equations
 - Adding and subtracting rational and exponential equations
 - Compare linear and nonlinear equations with graphs and identify which is which
- Some resources that can help you are:
 - [The Accuplacer sample questions](#), which can give you an idea of what to expect on the test and how to answer them.
 - [The Accuplacer Learning Locator](#), which can give you videos and practice questions based on your level. The codes for this score range are AAF02 (237-249), AAF03 (250-262), and AAF04 (262-275).
 - [The Mometrix Accuplacer AAF Practice Test](#), which offers a full-length practice test with detailed explanations.
 - [Khan Academy](#), which offers videos and practice questions based on a search using keywords.
 - [Mathhelp.com](#), which offers free online courses covering Accuplacer materials.
 - [MyOpenMath](#), which offers a free online self-study in Pre Calculus 1.

276-300

- This score range indicates that you have **excellent algebra and trigonometry skills** and are ready for upper-level college math courses such as **calculus**.
- You should focus on maintaining your current skills from the topics above and expanding your knowledge of advanced topics below.
- You should also review the types of questions that are asked on the Accuplacer AAF test, such as:
 - Making connections between graphical, tabular, and algebraic representations of absolute values
 - Solve quadratic equations using any method, including completing the square
 - Solve problems using sine, cosine, and tangent, including within the unit circle

- Solve logarithmic equations
- Some resources that can help you are:
 - [The Accuplacer sample questions](#), which can give you an idea of what to expect on the test and how to answer them.
 - [The Accuplacer Learning Locator](#), which can give you videos and practice questions based on your level. The code for this score range is AAF05.
 - [The Mometrix Accuplacer AAF Practice Test](#), which offers a full-length practice test with detailed explanations.
 - [Khan Academy](#), which offers videos and practice questions based on a search using keywords.
 - [Mathhelp.com](#), which offers free online courses covering Accuplacer materials.
 - [MyOpenMath](#), which offers a free online self-study in Pre Calculus 1 and 2.