

Math Placement Test Concepts

Demonstrating proficiency in the concepts listed under each course indicates a readiness for that class.

Course 1 (6th Grade):

Long multiplication; Long addition; Round a whole number; Identify place values; Long division; Perimeter of a rectangle; Decimal addition; Convert improper fraction to a reduced mixed number; Plot a point on a graph; Long Subtraction; Adding fractions; Rate problem

Course 2 (7th Grade):

Plot a point a graph; Long subtraction; Adding fractions; Multiplication of fractions; Subtracting decimals; Dividing decimals; Finding missing lengths of a figure; Convert decimals to words; Fractions (as a decimal, reduced fraction, and percent); Probability; Prime factorization; Order of operations; Rounding a decimal; Addition of mixed numbers; Finding the average

Course 3 (8th Grade):

Unit price; Subtraction of mixed numbers; Multiplication of mixed numbers; Area of a triangle; Perimeter of a figure; Prime factorization; Division of decimals; Solve for a variable; Order of operations; Write a percent (as a reduced fraction and decimal); Solve exponents and radicals; Cross multiplication; Calculate percentages; Rate problems; Find percentage of a number

Algebra 1 (9th Grade):

Area and circumference of a circle; Subtraction of a negative number; Distributive property; Powers of fractions; Solve for a variable; Solve for a variable; Multiplication and division of mixed numbers; Rational expressions; Rate problems; Find the mean of a data set; Simplify polynomials (combine like terms); Decimals (addition, subtraction, multiplication, and division); Find the slope of an equation; Area of a parallelogram

Geometry (10th), Algebra 2 (11th grade):

Order of operations; Scientific notation; Arithmetic sequence; Determine minimum, range, and domain; Solving systems of equations; Missing side of a right triangle; Graph a line given an equation; Solving equation containing absolute value; Factorization of a polynomial; Simplify radical expressions; Solving for a variable; Simplifying expressions with exponents; Solving quadratic equations; Simplifying rational expression; Multiplying two binomials

Beyond Algebra 2 (12th Grade):

Solving systems of equations by elimination; Long division with polynomials; Solving systems of equations (using any preferred method); Simplifying radicals; Finding equations to parallel lines; Fractional exponents; Simplifying complex numbers; Rationalizing the denominator; Solving quadratic equations (Quadratic Formula); Solving radical equations; Finding missing sides of a triangle using Trigonometry; Logarithms; Graphing linear inequalities; Multiplying matrices