

Pacing Guide for Acuity Readiness Form A Grade 6 - Math

Grade	Domain	Cluster	Cluster	Standard Skills	DOK
Grade 05	5.G Geometry	Graph points on the coordinate plane to solve real-world and mathematical problems	Graph points on the coordinate plane to solve real-world and mathematical problems	5.G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).	Level 1 - Recognizing and Recall
Grade 05	5.G Geometry	Graph points on the coordinate plane to solve real-world and mathematical problems	Graph points on the coordinate plane to solve real-world and mathematical problems	5.G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).	Level 2 - Using Fundamental Concepts and Procedures/ Level 1 - Recall
Grade 05	5.G Geometry	Graph points on the coordinate plane to solve real-world and mathematical problems	Graph points on the coordinate plane to solve real-world and mathematical problems	5.G.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	Level 1 - Recall
Grade 05	5.MD Measurement and Data	Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition	5.MD.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement.	5.MD.3.b A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.MD Measurement and Data	Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition	5.MD.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.	5.MD.5.b Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.NBT Number and Operations in Base Ten	Understand the place value system	5.NBT.3 Read, write, and compare decimals to thousandths.	5.NBT.3.a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.	Level 1 - Recall
Grade 05	5.NBT Number and Operations in Base Ten	Understand the place value system	5.NBT.3 Read, write, and compare decimals to thousandths.	5.NBT.3.a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.	Level 1 - Recall
Grade 05	5.NBT Number and Operations in Base Ten	Understand the place value system	5.NBT.3 Read, write, and compare decimals to thousandths.	5.NBT.3.b Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.NBT Number and Operations in Base Ten	Perform operations with multi-digit whole numbers and with decimals to hundredths	Perform operations with multi-digit whole numbers and with decimals to hundredths	5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm.	Level 1 - Recall

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Grade 05	5.OA Operations and Algebraic Thinking	Write and interpret numerical expressions	Write and interpret numerical expressions	5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.OA Operations and Algebraic Thinking	Write and interpret numerical expressions	Write and interpret numerical expressions	5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation add 8 and 7, then multiply by 2 as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.	Level 2 - Using Fundamental Concepts and Procedures/ Level 1- Recognizing and Recalling
Grade 05	5.OA Operations and Algebraic Thinking	Analyze patterns and relationships	Analyze patterns and relationships	5.OA.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule Add 3 and the starting number 0, and given the rule Add 6 and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.	Level 2 - Using Fundamental Concepts and Procedures
Grade 06	6.EE Expressions and Equations	Apply and extend previous understandings of arithmetic to algebraic expressions	6.EE.2 Write, read, and evaluate expressions in which letters stand for numbers.	6.EE.2.b Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. For example, describe the expression $2(8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms.	Level 2 - Using Fundamental Concepts and Procedures
Grade 06	6.EE Expressions and Equations	Apply and extend previous understandings of arithmetic to algebraic expressions	6.EE.2 Write, read, and evaluate expressions in which letters stand for numbers.	6.EE.2.c Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.	Level 2 - Using Fundamental Concepts and Procedures
Grade 06	6.EE Expressions and Equations	Represent and analyze quantitative relationships between dependent and independent variables	Represent and analyze quantitative relationships between dependent and independent variables	6.EE.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.	Level 2 - Using Fundamental Concepts and Procedures
Grade 06	6.G Geometry	Solve real-world and mathematical problems involving area, surface area, and volume	Solve real-world and mathematical problems involving area, surface area, and volume	6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	Level 2 - Using Fundamental Concepts and Procedures

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Grade 06	6.NS The Number System	Apply and extend previous understandings of multiplication and division to divide fractions by fractions	Apply and extend previous understandings of multiplication and division to divide fractions by fractions	6.NS.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$ -cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi?	Level 2 - Using Fundamental Concepts and Procedures
Grade 06	6.NS The Number System	Compute fluently with multi-digit numbers and find common factors and multiples	Compute fluently with multi-digit numbers and find common factors and multiples	6.NS.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.	Level 2 - Using Fundamental Concepts and Procedures
Grade 06	6.NS The Number System	Apply and extend previous understandings of numbers to the system of rational numbers	6.NS.6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.	6.NS.6.b Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.	Level 2 - Using Fundamental Concepts and Procedures
Grade 06	6.NS The Number System	Apply and extend previous understandings of numbers to the system of rational numbers	6.NS.6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.	6.NS.6.c Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.	Level 1 - Recall
Grade 06	6.RP Ratios and Proportional Relationships	Understand ratio concepts and use ratio reasoning to solve problems	6.RP.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.	6.RP.3.c Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means $30/100$ times the quantity); solve problems involving finding the whole, given a part and the percent.	Level 2 - Using Fundamental Concepts and Procedures
Grade 06	6.SP Statistics and Probability	Develop understanding of statistical variability	Develop understanding of statistical variability	6.SP.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, How old am I? is not a statistical question, but How old are the students in my school? is a statistical question because one anticipates variability in students' ages.	Level 2 - Using Fundamental Concepts and Procedures