

## Pacing Guides for Acuity Readiness Form B Grade 6- Mathematics

Grade	Domain	Cluster	Cluster	Standard	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 Recalling
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 - Recognizing and Recalling
Grade 05	5.G Geometry	Classify two-dimensional figures into categories based on their properties	Classify two-dimensional figures into categories based on their properties	5.G.4 Classify two-dimensional figures in a hierarchy based on properties.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.MD Measurement and Data	Represent and interpret data	Represent and interpret data	5.MD.2 Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.	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
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	Reason about and solve one-variable equations and inequalities	Reason about and solve one-variable equations and inequalities	6.EE.5 Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	Level 2 - Using Fundamental Concepts and Procedures
Grade 06	6.EE Expressions and Equations	Reason about and solve one-variable equations and inequalities	Reason about and solve one-variable equations and inequalities	6.EE.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.	Level 1 - Recognizing and Recalling
Grade 06	6.EE Expressions and Equations	Reason about and solve one-variable equations and inequalities	Reason about and solve one-variable equations and inequalities	6.EE.7 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which $p$ , $q$ and $x$ are all nonnegative rational numbers.	Level 2 - Using Fundamental Concepts and Procedures
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 $(2/3) / (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) / (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$ . (In general, $(a/b) / (c/d) = ad/bc$ .) 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	Apply and extend previous understandings of numbers to the system of rational numbers	Apply and extend previous understandings of numbers to the system of rational numbers	6.NS.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.	Level 1 - Recall
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 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.7 Understand ordering and absolute value of rational numbers.	6.NS.7.b Write, interpret, and explain statements of order for rational numbers in real-world contexts. For example, write $-3$ degrees C $>$ $-7$ degrees C to express the fact that $-3$ degrees C is warmer than $-7$ degrees C.	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.7 Understand ordering and absolute value of rational numbers.	6.NS.7.d Distinguish comparisons of absolute value from statements about order. For example, recognize that an account balance less than $-30$ dollars represents a debt greater than $30$ dollars.	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.a Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.	Level 1 - Recognizing and Recalling
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.b Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took $7$ hours to mow $4$ lawns, then at that rate, how many lawns could be mowed in $35$ hours? At what rate were lawns being mowed?	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
Grade 06	6.SP Statistics and Probability	Summarize and describe distributions	Summarize and describe distributions	6.SP.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	Level 2 - Using Fundamental Concepts and Procedures