

## Pacing Guides for Acuity Readiness Form C Grade 5 - Math

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 - Recall
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.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.	Level 1 - Recognizing and Recalling
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.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 1 - Recognizing and Recalling
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 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.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 1 - Recognizing and Recalling

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.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	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.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Level 1 - Recall
Grade 05	5.NF Number and Operations - Fractions	Use equivalent fractions as a strategy to add and subtract fractions	Use equivalent fractions as a strategy to add and subtract fractions	5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$ . (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$ .)	Level 1 - Recall
Grade 05	5.NF Number and Operations - Fractions	Use equivalent fractions as a strategy to add and subtract fractions	Use equivalent fractions as a strategy to add and subtract fractions	5.NF.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$ , by observing that $\frac{3}{7} < \frac{1}{2}$ .	Level 1 - Recall

Grade 05	5.NF Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions	5.NF.3 Interpret a fraction as division of the numerator by the denominator ( $a/b = a \div b$ ). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret $3/4$ as the result of dividing 3 by 4, noting that $3/4$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $3/4$ . If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.NF Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions	5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.	5.NF.4.a Interpret the product $(a/b) \times q$ as a parts of a partition of $q$ into $b$ equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$ . For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$ , and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$ . (In general, $(a/b) \times (c/d) = ac/bd$ .)	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.NF Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions	5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.	5.NF.4.b Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.NF Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions	5.NF.5 Interpret multiplication as scaling (resizing), by:	5.NF.5.a Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.NF Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions	5.NF.5 Interpret multiplication as scaling (resizing), by:	5.NF.5.b Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (nxa)/(nxb)$ to the effect of multiplying $a/b$ by 1.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.NF Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions	5.NF.7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.	5.NF.7.c Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $1/3$ -cup servings are in 2 cups of raisins?	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.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
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