Pacing Guides for Acuity Readiness Form C Grade 7 - Math

Grade	Domain	Cluster	Cluster	Standard	DOK
Grade 07	7.EE Expressions and Equations	Use properties of operations to generate equivalent expressions	Use properties of operations to generate equivalent expressions	7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	Level 1 - Recall
Grade 07	7.EE Expressions and Equations	Use properties of operations to generate equivalent expressions	Use properties of operations to generate equivalent expressions	7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	Level 2 - Using Fundamental Concepts and Procedures
Grade 07	7.EE Expressions and Equations	Solve real-life and mathematical problems using numerical and algebraic expressions and equations	Solve real-life and mathematical problems using numerical and algebraic expressions and equations	7.EE.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making $25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or $2.50, for a new salary of $27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.	Level 1 - Recall
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Grade 07	7.EE Expressions and Equations	Solve real-life and mathematical problems using numerical and algebraic expressions and equations	7.EE.4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.	7.EE.4.a Solve word problems leading to equations of the form px + q = r and p(x + q) = r, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?	Level 1 - Recall
Grade 07	7.EE Expressions and Equations	Solve real-life and mathematical problems using numerical and algebraic expressions and equations	7.EE.4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.	7.EE.4.a Solve word problems leading to equations of the form px + q = r and p(x + q) = r, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?	Level 2 - Using Fundamental Concepts and Procedures
Grade 07	7.EE Expressions and Equations	Solve real-life and mathematical problems using numerical and algebraic expressions and equations	7.EE.4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.	7.EE.4.b Solve word problems leading to inequalities of the form px + q > r or px + q < r, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. For example: As a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write an inequality for the number of sales you need to make, and describe the solutions.	Level 2 - Using Fundamental Concepts and Procedures
Grade 07	7.G Geometry	Draw, construct, and describe geometrical figures and describe the relationships between them	Draw, construct, and describe geometrical figures and describe the relationships between them	7.G.1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	Level 1 - Recognizing and Recalling
Grade 07	7.G Geometry	Draw, construct, and describe geometrical figures and describe the relationships between them	Draw, construct, and describe geometrical figures and describe the relationships between them	7.G.2 Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	Level 1 - Recognizing and Recalling

Grade 07	7.G Geometry	Draw, construct, and describe geometrical figures and describe the relationships between them	Draw, construct, and describe geometrical figures and describe the relationships between them	7.G.2 Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	Level 2 - Using Fundamental Concepts and Procedures
Grade 07	7.G Geometry	Draw, construct, and describe geometrical figures and describe the relationships between them	Draw, construct, and describe geometrical figures and describe the relationships between them	7.G.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids	~
Grade 07	7.G Geometry	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume	7.G.5 Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.	Level 2 - Using Fundamental Concepts and Procedures
Grade 07	7.NS The Number System	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers	7.NS.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.	7.NS.2.a Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as (-1)(-1) = 1 and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.	Level 1 - Recall
Grade 07	7.NS The Number System	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers	7.NS.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.	7.NS.2.a Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as (-1)(-1) = 1 and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.	Level 2 - Using Fundamental Concepts and Procedures
Grade 07	7.NS The Number System	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers	7.NS.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.	7.NS.2.c Apply properties of operations as strategies to multiply and divide rational numbers.	Level 2 - Using Fundamental Concepts and Procedures
Grade 07	7.NS The Number System	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers	7.NS.3 Solve real-world and mathematical problems involving the four operations with rational numbers.	Level 2 - Using Fundamental Concepts and Procedures

Grade 07	7.RP Ratios and Proportional Relationships	Analyze proportional relationships and use them to solve real-world and mathematical problems	Analyze proportional relationships and use them to solve real-world and mathematical problems	7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction 1/2/1/4 miles per hour, equivalently 2 miles per hour.	Level 2 - Using Fundamental Concepts and Procedures
Grade 07	7.RP Ratios and Proportional Relationships	Analyze proportional relationships and use them to solve real-world and mathematical problems	7.RP.2 Recognize and represent proportional relationships between quantities.	7.RP.2.a Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.	Level 2 - Using Fundamental Concepts and Procedures
Grade 07	7.RP Ratios and Proportional Relationships	Analyze proportional relationships and use them to solve real-world and mathematical problems	7.RP.2 Recognize and represent proportional relationships between quantities.	7.RP.2.b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.	Level 2 - Using Fundamental Concepts and Procedures
Grade 07	7.RP Ratios and Proportional Relationships	Analyze proportional relationships and use them to solve real-world and mathematical problems	7.RP.2 Recognize and represent proportional relationships between quantities.	7.RP.2.d Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, r) where r is the unit rate.	Level 1 - Recognizing and Recalling
Grade 07	7.RP Ratios and Proportional Relationships	Analyze proportional relationships and use them to solve real-world and mathematical problems	7.RP.2 Recognize and represent proportional relationships between quantities.	7.RP.2.d Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, r) where r is the unit rate.	Level 2 - Using Fundamental Concepts and Procedures
Grade 07	7.SP Statistics and Probability	Use random sampling to draw inferences about a population	Use random sampling to draw inferences about a population	7.SP.2 Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.	Level 2 - Using Fundamental Concepts and Procedures

Grade 07	7.SP Statistics and Probability	Draw informal comparative inferences about two populations	Draw informal comparative inferences about two populations	7.SP.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.	Level 2 - Using Fundamental Concepts and Procedures
Grade 07	7.SP Statistics and Probability	Investigate chance processes and develop, use, and evaluate probability models	Investigate chance processes and develop, use, and evaluate probability models	7.SP.6 Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.	Level 2 - Using Fundamental Concepts and Procedures
Grade 07	7.SP Statistics and Probability	Investigate chance processes and develop, use, and evaluate probability models	7.SP.7 Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy	7.SP.7.a Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.	Level 1 - Recall
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