Pacing Guides for Acuity Readiness Form C Grade 8 - Math

Grade	Domain	Cluster	Cluster	Standard	DOK
Grade 08	8.EE Expressions and Equations	Work with radicals and integer exponents	Work with radicals and integer exponents	8.EE.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example, 3^2 x 3^-5 = 3^-3 = 1/3^3 = 1/27.	Level 1 - Recall
Grade 08	8.EE Expressions and Equations	Understand the connections between proportional relationships, lines, and linear equations	Understand the connections between proportional relationships, lines, and linear equations	8.EE.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.	Level 2 - Using Fundamental Concepts and Procedures
Grade 08	8.EE Expressions and Equations	Analyze and solve linear equations and pairs of simultaneous linear equations	8.EE.7 Solve linear equations in one variable.	8.EE.7.a Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form x = a, a = a, or a = b results (where a and b are different numbers).	Level 2 - Using Fundamental Concepts and Procedures
Grade 08	8.EE Expressions and Equations	Analyze and solve linear equations and pairs of simultaneous linear equations	8.EE.7 Solve linear equations in one variable.	8.EE.7.b Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.	~
Grade 08	8.EE Expressions and Equations	Analyze and solve linear equations and pairs of simultaneous linear equations	8.EE.8 Analyze and solve pairs of simultaneous linear equations.	8.EE.8.b Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. For example, 3x + 2y = 5 and 3x + 2y = 6 have no solution because 3x + 2y cannot simultaneously be 5 and 6.	Level 2 - Using Fundamental Concepts and Procedures
Grade 08	8.EE Expressions and Equations	Analyze and solve linear equations and pairs of simultaneous linear equations	8.EE.8 Analyze and solve pairs of simultaneous linear equations.	8.EE.8.c Solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.	Level 2 - Using Fundamental Concepts and Procedures
Grade 08	8.F Functions	Define, evaluate, and compare functions	Define, evaluate, and compare functions	8.F.1 Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.	Level 3 - Concluding and Explaining

Grade 08	8.F Functions	Define, evaluate, and compare functions	Define, evaluate, and compare functions	8.F.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.	Level 2 - Using Fundamental Concepts and Procedures
Grade 08	8.F Functions	Define, evaluate, and compare functions	Define, evaluate, and compare functions	8.F.3 Interpret the equation y = mx + b as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. For example, the function A = s^2 giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.	Level 1 - Recall
Grade 08	8.F Functions	Use functions to model relationships between quantities	Use functions to model relationships between quantities	8.F.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.	Level 2 - Using Fundamental Concepts and Procedures
Grade 08	8.F Functions	Use functions to model relationships between quantities	Use functions to model relationships between quantities	8.F.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.	Level 2 - Using Fundamental Concepts and Procedures
Grade 08	8.G Geometry	Understand congruence and similarity using physical models, transparencies, or geometry software	8.G.1 Verify experimentally the properties of rotations, reflections, and translations:	8.G.1.a Lines are taken to lines, and line segments to line segments of the same length.	Level 1 - Recall
Grade 08	8.G Geometry	Understand congruence and similarity using physical models, transparencies, or geometry software	8.G.1 Verify experimentally the properties of rotations, reflections, and translations:	8.G.1.b Angles are taken to angles of the same measure.	Level 2 - Using Fundamental Concepts and Procedures
Grade 08	8.G Geometry	Understand congruence and similarity using physical models, transparencies, or geometry software	8.G.1 Verify experimentally the properties of rotations, reflections, and translations:	8.G.1.c Parallel lines are taken to parallel lines.	Level 1 - Recall

Grade 08	8.G Geometry	Understand congruence and similarity using physical models, transparencies, or geometry software	Understand congruence and similarity using physical models, transparencies, or geometry software	8.G.2 Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.	Level 2 - Using Fundamental Concepts and Procedures
Grade 08	8.G Geometry	Understand congruence and similarity using physical models, transparencies, or geometry software	Understand congruence and similarity using physical models, transparencies, or geometry software	8.G.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.	Level 2 - Using Fundamental Concepts and Procedures
Grade 08	8.G Geometry	Understand congruence and similarity using physical models, transparencies, or geometry software	Understand congruence and similarity using physical models, transparencies, or geometry software	8.G.4 Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.	Level 2 - Using Fundamental Concepts and Procedures
Grade 08	8.G Geometry	Understand and apply the Pythagorean Theorem	Understand and apply the Pythagorean Theorem	8.G.7 Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.	Level 2 - Using Fundamental Concepts and Procedures
Grade 08	8.G Geometry	Understand and apply the Pythagorean Theorem	Understand and apply the Pythagorean Theorem	8.G.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	Level 2 - Using Fundamental Concepts and Procedures
Grade 08	8.NS The Number System	Know that there are numbers that are not rational, and approximate them by rational numbers	Know that there are numbers that are not rational, and approximate them by rational numbers	8.NS.2 Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., pi^2). For example, by truncating the decimal expansion of sqrt(2), show that sqrt(2) is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.	Level 1 - Recall
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Grade 08	8.SP Statistics and Probability	Investigate patterns of association in bivariate data	Investigate patterns of association in bivariate data	8.SP.1 Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.	Level 1 - Recall