

TCAP-ACH Grade 8 Mathematics Framework

Reporting Category 1: Mathematical Processes		%	# of Items
		16-20%	8-10
0806.1.1	Solve problems involving rate/time/distance (i.e., $d = rt$).		
0806.1.2	Interpret a qualitative graph representing a contextual situation.		
0806.1.3	Calculate rates involving cost per unit to determine the best buy.		

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Reporting Category 2: Number and Operations		%	# of Items
		20-26%	10-13
0806.2.1	Order and compare rational and irrational numbers and locate on the number line.		
0806.2.2	Identify numbers and square roots as rational or irrational.		
0806.2.3	Use scientific notation to compute products and quotients.		
0806.2.4	Solve real-world problems requiring scientific notation.		

TCAP-ACH Grade 8 Mathematics Framework

Reporting Category 3: Algebra		%	# of Items
		32-36%	16-18
0806.3.1	Find solutions to systems of two linear equations in two variables.		
0806.3.2	Solve the linear equation $f(x) = g(x)$.		
0806.3.4	Translate between various representations of a linear function.		
0806.3.5	Determine the slope of a line from an equation, two given points, a table or a graph.		
0806.3.6	Analyze the graph of a linear function to find solutions and intercepts.		
0806.3.7	Identify, compare and contrast functions as linear or nonlinear.		

TCAP-ACH Grade 8 Mathematics Framework

Reporting Category 4: Geometry and Measurement		%	# of Items
		12-16%	6-8
0806.4.1	Use the Pythagorean Theorem to solve contextual problems.		
0806.4.2	Apply the Pythagorean theorem to find distances between points in the coordinate plane to measure lengths and analyze polygons and polyhedra.		
0806.4.3	Find measures of the angles formed by parallel lines cut by a transversal.		

TCAP-ACH Grade 8 Mathematics Framework

Reporting Category 5: Data Analysis, Statistics, and Probability		%	# of Items
		10-12%	5-6
0806.5.3	Generalize the relationship between two sets of data using scatterplots and lines of best fit.		
0806.5.4	Recognize misrepresentations of published data in the media.		