

Grade 8 Mathematics - Pre-Algebra

Reporting Category	Content Complexity 1 - Recall 2 - Basic applications of skills and concepts 3 - Strategic thinking and complex reasoning	Standard Grouping	% of FSA Test	MFAS
Expressions & Equations	1	MAFS.8.EE.1.1	30%	• Exponents Tabled • Multiplying and Dividing Integer Exponents • Negative Exponential Expressions • Equivalent Powers Expressions
	1	MAFS.8.EE.1.2		• The Root of the Problem • Dimensions Needed • Roots and Radicals
	1	MAFS.8.EE.1.3		• Estimating Extreme Values • How Many Times? • Compare Numbers • Order Matters
	2	MAFS.8.EE.1.4		• Mixed Form Operations • Sums and Differences in Scientific Notation • Scientific Multiplication and Division • Scientific Calculator Display
	2	MAFS.8.EE.2.5		• Interpreting Slope • Proportional Paint • Compare Slopes
	2	MAFS.8.EE.2.6		• Slope Triangles • Deriving Lines - 1 • Deriving Lines - 2
	2	MAFS.8.EE.3.7		• Counting Solutions • Equation Prototypes • Linear Equations - 1 • Linear Equations - 2 • Linear Equations - 3
	2	MAFS.8.EE.3.8		• Identify the Solution • Solving Systems of Linear Equations • Solving System of Linear Equations by Graphing • How Many Solutions?

				• Writing System Equations • System Solutions
Functions	2	MAFS.8.F.1.1	25%	• What is a Function? • Identifying Algebraic Functions • Recognizing Functions • Tabulating Functions
	2	MAFS.8.F.1.2		• Innovative Functions • Speed Reading • Competing Functions • This House is Mine!
	2	MAFS.8.F.1.3		• What Am I? • Explaining Linear Functions • Nonlinear Functions • Linear or Nonlinear?
	3	MAFS.8.F.2.4		• Construction Function • Profitable Functions • Trekking Functions • Smart TV • Drain the Pool
	2	MAFS.8.F.2.5		• Jet Fuel • Population Trend • Graph the Ride • Bacterial Growth Graph
Geometry	2	MAFS.8.G.1.2	27%	• Proving Congruence • Rigid Motion - 1 • Rigid Motion - 2 • Rigid Motion - 3 • Multistep Congruence
	2	Also Assesses MAFS.8.G.1.1		• Segment Transformations • Angle Transformations • Parallel Line Transformations
	2	MAFS.8.G.1.3		• Dilation Coordinates • Translation Coordinates • Rotation Coordinates • Reflection Coordinates
	2	MAFS.8.G.1.4		• Proving Similarity • Similarity - 1 • Similarity - 2

	2	Also Assesses MAFS.8.G.1.1		• Similarity - 3
	2	MAFS.8.G.1.5		• Segment Transformations • Angle Transformations • Parallel Line Transformations
	2	MAFS.8.G.2.6		• Same Side Interior Angles • Justifying Angle Relationships • Justifying the Exterior Angle of a Triangle Theorem • What is the Triangle Relationship? • Justifying the Triangle Sum Theorem
	2	MAFS.8.G.2.7		• Pythagorean Squares • Explaining a Proof of the Pythagorean Theorem • Converse of the Pythagorean Theorem
	1	Also Assesses MAFS.8.G.2.8		• New Television • How Far to School • Three Dimensional Diagonal • Pyramid Height
	2	MAFS.8.G.3.9		• Distance Between Two Points • Distance on the Coordinate Plane • Coordinate Plane Triangle • Calculate Triangle Sides
				• Cone Formula • Pyramid Formula • Cylinder Formula • Sphere Formula • Sugar Cone • Louvre Pyramid • Platinum Cylinder • Burning Sphere
	2	MAFS.8.SP.1.1		• Bungee Cord Data • Sleepy Statistics • Cheesy Statistics • Infectious Statistics • Population Density
	2	MAFS.8.SP.1.2		• Line of Good Fit - 1 • Line of Good Fit - 2 • Two Scatterplots • Three Scatterplots
	2	MAFS.8.SP.1.3		• Tuition
Statistics & Probability and The Number System			18%	

			• Foot Length • Developmental Data • Stretching Statistics
	3	MAFS.8.SP.1.4	• Music and Sports • Two-Way Relative Frequency Table • School Start Time • Siblings and Pets
	1	MAFS.8.NS.1.1	• Rational Numbers • Fraction to Decimal Conversion • Decimal to Fraction Conversion
	2	MAFS.8.NS.1.2	• Approximating Irrational Numbers • Locating Irrational Numbers • Comparing Irrational Numbers • The Irrational Beauty of the Golden Ratio