

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%	<ul style="list-style-type: none"> ● Exponents Tabled ● Multiplying and Dividing Integer Exponents ● Negative Exponential Expressions ● Equivalent Powers Expressions
	1	MAFS.8.EE.1.2		<ul style="list-style-type: none"> ● The Root of the Problem ● Dimensions Needed ● Roots and Radicals
	1	MAFS.8.EE.1.3		<ul style="list-style-type: none"> ● Estimating Extreme Values ● How Many Times? ● Compare Numbers ● Order Matters
	2	MAFS.8.EE.1.4		<ul style="list-style-type: none"> ● Mixed Form Operations ● Sums and Differences in Scientific Notation ● Scientific Multiplication and Division ● Scientific Calculator Display
	2	MAFS.8.EE.2.5		<ul style="list-style-type: none"> ● Interpreting Slope ● Proportional Paint ● Compare Slopes
	2	MAFS.8.EE.2.6		<ul style="list-style-type: none"> ● Slope Triangles ● Deriving Lines - 1 ● Deriving Lines - 2
	2	MAFS.8.EE.3.7		<ul style="list-style-type: none"> ● Counting Solutions ● Equation Prototypes ● Linear Equations - 1 ● Linear Equations - 2 ● Linear Equations - 3
	2	MAFS.8.EE.3.8		<ul style="list-style-type: none"> ● Identify the Solution ● Solving Systems of Linear Equations ● Solving System of Linear Equations by Graphing

				<ul style="list-style-type: none"> • How Many Solutions? • Writing System Equations • System Solutions
Functions	2	MAFS.8.F.1.1	25%	<ul style="list-style-type: none"> • What is a Function? • Identifying Algebraic Functions • Recognizing Functions • Tabulating Functions
	2	MAFS.8.F.1.2		<ul style="list-style-type: none"> • Innovative Functions • Speed Reading • Competing Functions • This House is Mine!
	2	MAFS.8.F.1.3		<ul style="list-style-type: none"> • What Am I? • Explaining Linear Functions • Nonlinear Functions • Linear or Nonlinear?
	3	MAFS.8.F.2.4		<ul style="list-style-type: none"> • Construction Function • Profitable Functions • Trekking Functions • Smart TV • Drain the Pool
	2	MAFS.8.F.2.5		<ul style="list-style-type: none"> • Jet Fuel • Population Trend • Graph the Ride • Bacterial Growth Graph
Geometry	2	MAFS.8.G.1.2	27%	<ul style="list-style-type: none"> • Proving Congruence • Rigid Motion - 1 • Rigid Motion - 2 • Rigid Motion - 3 • Multistep Congruence
	2	Also Assesses MAFS.8.G.1.1		<ul style="list-style-type: none"> • Segment Transformations • Angle Transformations • Parallel Line Transformations
	2	MAFS.8.G.1.3		<ul style="list-style-type: none"> • Dilation Coordinates • Translation Coordinates • Rotation Coordinates • Reflection Coordinates

	2	MAFS.8.G.1.4		<ul style="list-style-type: none"> • Proving Similarity • Similarity - 1 • Similarity - 2 • Similarity - 3
	2	Also Assesses MAFS.8.G.1.1		<ul style="list-style-type: none"> • Segment Transformations • Angle Transformations • Parallel Line Transformations
	2	MAFS.8.G.1.5		<ul style="list-style-type: none"> • 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.2.6		<ul style="list-style-type: none"> • Pythagorean Squares • Explaining a Proof of the Pythagorean Theorem • Converse of the Pythagorean Theorem
	2	MAFS.8.G.2.7		<ul style="list-style-type: none"> • New Television • How Far to School • Three Dimensional Diagonal • Pyramid Height
	1	Also Assesses MAFS.8.G.2.8		<ul style="list-style-type: none"> • Distance Between Two Points • Distance on the Coordinate Plane • Coordinate Plane Triangle • Calculate Triangle Sides
	2	MAFS.8.G.3.9		<ul style="list-style-type: none"> • Cone Formula • Pyramid Formula • Cylinder Formula • Sphere Formula • Sugar Cone • Louvre Pyramid • Platinum Cylinder • Burning Sphere
Statistics & Probability and The Number System	2	MAFS.8.SP.1.1	18%	<ul style="list-style-type: none"> • Bungee Cord Data • Sleepy Statistics • Cheesy Statistics • Infectious Statistics • Population Density

2	MAFS.8.SP.1.2	<ul style="list-style-type: none"> • Line of Good Fit - 1 • Line of Good Fit - 2 • Two Scatterplots • Three Scatterplots
2	MAFS.8.SP.1.3	<ul style="list-style-type: none"> • Tuition • Foot Length • Developmental Data • Stretching Statistics
3	MAFS.8.SP.1.4	<ul style="list-style-type: none"> • Music and Sports • Two-Way Relative Frequency Table • School Start Time • Siblings and Pets
1	MAFS.8.NS.1.1	<ul style="list-style-type: none"> • Rational Numbers • Fraction to Decimal Conversion • Decimal to Fraction Conversion
2	MAFS.8.NS.1.2	<ul style="list-style-type: none"> • Approximating Irrational Numbers • Locating Irrational Numbers • Comparing Irrational Numbers • The Irrational Beauty of the Golden Ratio