

New Mexico Expanded Grade Band Expectations Math: Grades 7 and 8

Strand: NUMBER AND OPERATIONS

Standard I: Students will understand numerical concepts and mathematical operations.

	5–8 Benchmark 1: Understand numbers, ways of representing numbers, relationships among numbers, and number systems		5–8 Benchmark 2: Understand the meaning of operations and how they relate to one another		5–8 Benchmark 3: Compute fluently and make reasonable estimates	
ENGAGEMENT	The student	GLPS		GLPS		GLPS
	<i>1-a attends to mathematical materials and stimuli that involve sensory input (e.g., sight, sound, feel) of numbers</i>	7.2 8.2	<i>1-a attends to mathematical materials and stimuli that involve sensory input (e.g., sight, sound, feel) of math operations</i>	7.1 8.2	<i>1-a attends to mathematical materials and stimuli that involve sensory input (e.g., sight, sound, feel) of computation and estimation</i>	7.1 8.2
	2-a maintains and shifts attention between two or more mathematical objects, activities, or classroom partners that involve sensory input (e.g., sight, sound, feel) of numbers	7.2 8.2	<i>2-a maintains and shifts attention between two or more mathematical objects, activities, or classroom partners that involve sensory input (e.g., sight, sound, feel) of math operations</i>	7.1 8.2	<i>2-a maintains and shifts attention between two or more mathematical objects, activities, or classroom partners that involve sensory input (e.g., sight, sound, feel) of computation and estimation</i>	7.1 8.2

	5–8 Benchmark 1: Understand numbers, ways of representing numbers, relationships among numbers, and number systems		5–8 Benchmark 2: Understand the meaning of operations and how they relate to one another		5–8 Benchmark 3: Compute fluently and make reasonable estimates	
	<i>2-b maintains interactions with others while participating in math activities that involve sensory input (e.g., sight, sound, feel) of numbers</i>	7.2 8.2	<i>2-b maintains interactions with others while participating in math activities that involve sensory input (e.g., sight, sound, feel) of math operations</i>	7.1 8.2	<i>2-b maintains interactions with others while participating in math activities that involve sensory input (e.g., sight, sound, feel) of computation and estimation</i>	7.1 8.2
PRE-SYMBOLIC	The student	GLPS		GLPS		GLPS
	<i>3-a matches sets with the same number of objects</i>	7.3			<i>3-a matches sets with the same number of objects</i>	7.1 8.2
	<i>4-a demonstrates that objects counted later in a sequence represent greater quantities</i>	8.2			<i>4-a identifies larger and smaller quantities of objects</i>	7.4
	4-b produces numerals between 1 and 9	7.2				
	<i>4-c identifies which numerals are more or less than other numbers</i>	7.2 8.2				

	5–8 Benchmark 1: Understand numbers, ways of representing numbers, relationships among numbers, and number systems		5–8 Benchmark 2: Understand the meaning of operations and how they relate to one another		5–8 Benchmark 3: Compute fluently and make reasonable estimates	
SYMBOLIC	The student	GLPS		GLPS		GLPS
	<i>5-a demonstrates that numbers counted later in a sequence represent greater quantities up to 30</i>	7.2 8.1	<i>6-a demonstrates that “add” means combine/put together, and “subtract” means take away</i>	7.9 8.2	<i>5-a demonstrates that objects counted later in a sequence represent greater quantities than the numbers counted earlier</i>	7.1 8.2 8.7
	<i>6-a places numerals 0 to 10 in order</i>	7.2 8.2	<i>6-b uses a calculator or relevant technology to perform basic math calculations</i>	7.9 8.2	<i>5-b makes comparisons involving quantity using term “about”</i>	7.1 8.2 8.7
					<i>6-a identifies which numerals are greater or less than other numerals from 0 to 20</i>	7.1 7.4 8.2

	5–8 Benchmark 1: Understand numbers, ways of representing numbers, relationships among numbers, and number systems		5–8 Benchmark 2: Understand the meaning of operations and how they relate to one another		5–8 Benchmark 3: Compute fluently and make reasonable estimates	
EXTENDED SYMBOLIC	The student	GLPS		GLPS		GLPS
	<i>7-a provides correct quantity of up to 20 objects</i>	7.2 8.2	<i>7-a solves problems involving addition and subtraction of whole numbers up to 30</i>	7.1 7.9 8.2	<i>7-a estimates the necessary amount of money to make a purchase</i>	8.6
	<i>8-a places numerals from 0 to 30 in order</i>	7.2 8.1	<i>8-a selects the appropriate operation(s) to perform in a given problem (e.g., addition, subtraction, and multiplication)</i>	7.1 7.9 8.2	<i>7-b estimates numerical quantities using terms “more,” “less,” “fewer,” or “equal”</i>	7.1 7.4 8.2
			<i>8-b solves addition, subtraction, and multiplication problems using whole numbers up to 30</i>	7.1 7.9 8.2	<i>7-c solves problems involving addition and subtraction of whole numbers up to 30</i>	7.1 8.2
					<i>8-a compares estimations with calculated solutions</i>	7.1 8.2
					<i>8-b uses a variety of computational methods to estimate quantities involving whole numbers</i>	7.1 8.2 8.7

Strand: Algebra
Standard II: Students will understand algebraic concepts and applications.

	5–8 Benchmark 1: Understand patterns, relations, and functions		5–8 Benchmark 2: Represent and analyze mathematical situations and structures using algebraic symbols		5–8 Benchmark 3: Use mathematical models to represent and understand quantitative relationships		5–8 Benchmark 4: Analyze changes in various contexts	
ENGAGEMENT	The student	GLPS		GLPS		GLPS		GLPS
	<i>1-a attends to mathematical stimuli and materials that involve sensory input (e.g., sight, sound, feel) of math patterns</i>	7.1	<i>1-a attends to mathematical stimuli and materials that involve sensory input (e.g., sight, sound, feel) of algebraic symbols</i>	7.6 8.7	<i>1-a attends to mathematical stimuli and materials that involve sensory input (e.g., sight, sound, feel) of quantity</i>	7.3 8.1	<i>1-a attends to mathematical stimuli and materials that involve sensory input (e.g., sight, sound, feel) of change</i>	7.1 8.1

	5–8 Benchmark 1: Understand patterns, relations, and functions		5–8 Benchmark 2: Represent and analyze mathematical situations and structures using algebraic symbols		5–8 Benchmark 3: Use mathematical models to represent and understand quantitative relationships		5–8 Benchmark 4: Analyze changes in various contexts	
	<i>2-a maintains and shifts attention between two or more mathematical objects, activities, or classroom partners that involve sensory input (e.g., sight, sound, feel) of math patterns</i>	7.1	<i>2-a maintains and shifts attention between two or more mathematical objects, activities, or classroom partners that involve sensory input (e.g., sight, sound, feel) of algebraic symbols</i>	7.6 8.7	<i>2-a maintains and shifts attention between two or more mathematical objects, activities, or classroom partners that involve sensory input (e.g., sight, sound, feel) of quantity</i>	7.3 8.1	<i>1-b shows anticipation for familiar math activities and materials that involve sensory input (e.g., sight, sound, feel) of change</i>	7.1 8.1
	<i>2-b maintains interactions with others during math activities that involve sensory input (e.g., sight, sound, feel) of math patterns</i>	7.1	<i>2-b maintains interactions with others during math activities that involve sensory input (e.g., sight, sound, feel) of algebraic symbols</i>	7.6 8.7	<i>2-b maintains interactions with others during math activities that involve sensory input (e.g., sight, sound, feel) of quantity</i>	7.3 8.1	<i>2-a maintains and shifts attention between two or more mathematical objects, activities, or classroom partners with materials that involve sensory input (e.g., sight, sound, feel) of change</i>	7.1 8.1

	5–8 Benchmark 1: Understand patterns, relations, and functions		5–8 Benchmark 2: Represent and analyze mathematical situations and structures using algebraic symbols		5–8 Benchmark 3: Use mathematical models to represent and understand quantitative relationships		5–8 Benchmark 4: Analyze changes in various contexts	
							<i>2-b maintains interactions with others during math activities with materials that involve sensory input (e.g., sight, sound, feel) of change</i>	7.1 8.1
PRE-SYMBOLIC	The student	GLPS		GLPS		GLPS		GLPS
	3-a matches identical patterns	7.1						

	5–8 Benchmark 1: Understand patterns, relations, and functions		5–8 Benchmark 2: Represent and analyze mathematical situations and structures using algebraic symbols		5–8 Benchmark 3: Use mathematical models to represent and understand quantitative relationships		5–8 Benchmark 4: Analyze changes in various contexts	
SYMBOLIC	The student	GLPS		GLPS		GLPS		GLPS
	<i>6-a identifies and continues a simple numerical pattern (e.g., 1,4,7, _ , _)</i>	7.1	<i>5-a compares sets using terms “less,” “more,” and “equal”</i>	7.2 8.2	<i>6-a uses number lines to represent numerals from 0 to 30 in correct order</i>	7.3 8.1	<i>5-a recognizes patterns of change from everyday life</i>	8.7
							<i>6-a generalizes patterns of change from everyday life</i>	8.7
							<i>6-b recognizes that the same situation can be represented in more than one way</i>	8.7
							<i>6-c describes changes in quantity</i>	8.3

	5–8 Benchmark 1: Understand patterns, relations, and functions		5–8 Benchmark 2: Represent and analyze mathematical situations and structures using algebraic symbols		5–8 Benchmark 3: Use mathematical models to represent and understand quantitative relationships		5–8 Benchmark 4: Analyze changes in various contexts	
EXTENDED SYMBOLIC	The student	GLPS		GLPS		GLPS		GLPS
	<i>7-a matches numerals and letter variables to generate a pattern (e.g., 1,x,2,y, \rightarrow, \leftarrow) upon request</i>	7.1	<i>7-a uses a letter to represent an unknown number</i>	7.6 8.7	<i>7-a uses a variety of mathematical models to represent relationships (e.g., number line, manipulatives, pictures)</i>	7.3 8.1	<i>7-a uses graphs or tables to make predictions or solve problems involving change</i>	8.2
	<i>8-a generalizes repeating patterns</i>	8.2	<i>7-b generates one-step equations with one unknown, using addition and subtraction</i>	7.2 8.6	<i>8-a uses mathematical models to represent relationships using graphs, tables, charts, and diagrams</i>	7.3 8.1	<i>7-b understands how changes in one variable affect other variables</i>	8.3
			<i>8-a solves two-step equations with one unknown, using addition and subtraction</i>	8.2	<i>8-b identifies the missing numerals in a number line, using numerals from 0 to 30</i>	7.2	<i>7-c describes contextual situations in which change in one variable affects another variable</i>	8.3

	5–8 Benchmark 1: Understand patterns, relations, and functions		5–8 Benchmark 2: Represent and analyze mathematical situations and structures using algebraic symbols		5–8 Benchmark 3: Use mathematical models to represent and understand quantitative relationships		5–8 Benchmark 4: Analyze changes in various contexts	
			<i>8-b replaces variables with given values in simple mathematical equations (e.g., $2x + 3 = 7$, if $x = 2, 3, \text{ or } 4$)</i>	7.2 8.3			<i>8-a uses problem-solving strategies (e.g., looking for a pattern) to solve problems that involve change</i>	7.1 8.3
			<i>8-c generates a one- and/or two-step equation with one or more unknowns</i>	8.2				

Strand: Geometry

Standard III: Students will understand geometric concepts and applications.

	5–8 Benchmark 1: Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships		5–8 Benchmark 2: Specify locations and describe spatial relationships using coordinate geometry and other representational systems		5–8 Benchmark 3: Apply transformations and use symmetry to analyze mathematical situations		5–8 Benchmark 4: Use visualization, spatial reasoning, and geometric modeling to solve problems	
ENGAGEMENT	The student	GLPS		GLPS		GLPS		GLPS
	1-a attends to mathematical stimuli and geometric materials that involve sensory input (e.g., sight, sound, feel) of geometric shapes and solids	7.5 8.1	1-a attends to mathematical stimuli and geometric materials that involve sensory input (e.g., sight, sound, feel) of spatial relationships	7.1 8.1	<i>1-a attends to mathematical stimuli and geometric materials that involve sensory input (e.g., sight, sound, feel) of symmetry</i>	7.1 8.1	1-a attends to mathematical stimuli and geometric materials that involve sensory input (e.g., sight, sound, feel) of spatial relationships	7.1 8.3

	5–8 Benchmark 1: Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships		5–8 Benchmark 2: Specify locations and describe spatial relationships using coordinate geometry and other representational systems		5–8 Benchmark 3: Apply transformations and use symmetry to analyze mathematical situations		5–8 Benchmark 4: Use visualization, spatial reasoning, and geometric modeling to solve problems	
	<i>2-a maintains and shifts attention between two or more mathematical activities that involve sensory input (e.g., sight, sound, feel) of geometric shapes and solids</i>	7.5 8.1	<i>2-a maintains and shifts attention between two or more mathematical activities that involve sensory input (e.g., sight, sound, feel) of spatial relationships</i>	7.1 8.1	<i>2-a maintains and shifts attention between two or more mathematical activities that involve sensory input (e.g., sight, sound, feel) of symmetry</i>	7.1 8.1	<i>2-a maintains and shifts attention between two or more mathematical activities that involve sensory input (e.g., sight, sound, feel) of spatial relationships</i>	7.1 8.3

	5–8 Benchmark 1: Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships		5–8 Benchmark 2: Specify locations and describe spatial relationships using coordinate geometry and other representational systems		5–8 Benchmark 3: Apply transformations and use symmetry to analyze mathematical situations		5–8 Benchmark 4: Use visualization, spatial reasoning, and geometric modeling to solve problems	
	<i>2-b maintains interactions with others during math activities that involve sensory input (e.g., sight, sound, feel) of geometric shapes and solids</i>	7.5 8.1	2-b maintains interactions with others during math activities that involve sensory input (e.g., sight, sound, feel) of spatial relationships	7.1 8.1	<i>2-b maintains interactions with others during math activities that involve sensory input (e.g., sight, sound, feel) of symmetry</i>	7.1 8.1	2-b maintains interactions with others during math activities that involve sensory input (e.g., sight, sound, feel) of spatial relationships	7.1 8.3

	5–8 Benchmark 1: Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships		5–8 Benchmark 2: Specify locations and describe spatial relationships using coordinate geometry and other representational systems		5–8 Benchmark 3: Apply transformations and use symmetry to analyze mathematical situations		5–8 Benchmark 4: Use visualization, spatial reasoning, and geometric modeling to solve problems	
PRE-SYMBOLIC	The student	GLPS		GLPS		GLPS		GLPS
	<i>3-a matches two-dimensional shapes and three-dimensional figures</i>	7.1 8.1	3-a distinguishes between concrete positional objects (e.g., left, right, above, below)	7.1 8.1	<i>3-a matches identical three-dimensional figures</i>	7.1		
			4-a understands appropriate vocabulary for spatial relationships (e.g., left, right, above, below, up, down)	7.1 8.1	<i>4-a uses manipulatives to demonstrate movement of a concrete object (e.g., move it left, right, up, and down)</i>	8.2		

	5–8 Benchmark 1: Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships		5–8 Benchmark 2: Specify locations and describe spatial relationships using coordinate geometry and other representational systems		5–8 Benchmark 3: Apply transformations and use symmetry to analyze mathematical situations		5–8 Benchmark 4: Use visualization, spatial reasoning, and geometric modeling to solve problems	
SYMBOLIC	The student	GLPS		GLPS		GLPS		GLPS
	<i>5-a identifies three-dimensional geometric shapes (e.g., cubes, spheres, cylinders)</i>	7.5	5-a specifies locations and describes spatial relationships (e.g., left, right, up, down)	7.1 8.1	5-a uses manipulatives to demonstrate movement of a shape (e.g., rotate it; move it left, right, up, and down)	8.2	<i>5-a appropriately labels two-dimensional shapes (e.g., triangles, rectangles, circles)</i>	7.2 8.2
			6-a follows directions from one location to another using positional vocabulary	7.1 8.1	6-a uses a variety of materials (e.g., manipulatives, computer programs, etc.) to move objects left, right, up, and down	8.2	<i>5-b generates triangles, rectangles, and circles</i>	7.2

	5–8 Benchmark 1: Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships		5–8 Benchmark 2: Specify locations and describe spatial relationships using coordinate geometry and other representational systems		5–8 Benchmark 3: Apply transformations and use symmetry to analyze mathematical situations		5–8 Benchmark 4: Use visualization, spatial reasoning, and geometric modeling to solve problems	
			<i>6-b uses a combination of positional concepts to follow a given direction (e.g., “Put your name in the upper right-hand corner of your paper”)</i>	7.1 8.1	<i>6-b recognizes symmetrical geometric shapes and figures</i>	8.1	<i>6-a identifies properties (e.g., number of edges, faces, bases) of two- and three dimensional shapes (e.g., triangles, rectangles, circles, cubes, spheres, cylinders)</i>	7.2 8.2
							6-b identifies congruent triangles, rectangles, and circles	7.2 8.2

	5–8 Benchmark 1: Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships		5–8 Benchmark 2: Specify locations and describe spatial relationships using coordinate geometry and other representational systems		5–8 Benchmark 3: Apply transformations and use symmetry to analyze mathematical situations		5–8 Benchmark 4: Use visualization, spatial reasoning, and geometric modeling to solve problems	
EXTENDED SYMBOLIC	The student	GLPS		GLPS		GLPS		GLPS
	7-a matches shapes with corresponding symbols and shapes in the environment (e.g., yield sign, stop sign, exit sign)	7.1	<i>7-a appropriately labels a coordinate plane (x-axis, y-axis, and origin)</i>	7.1 8.1	<i>7-a uses a variety of materials (e.g., manipulatives, computer programs, etc.) to manipulate pictures or icons to demonstrate rotation, reflection, translation, and size increase or reduction</i>	8.2	<i>7-a identifies diameter of a circle</i>	7.1
	<i>8-a identifies point, line, and plane (e.g., find this point on a map)</i>	8.1	<i>7-b gives comprehensible directions from one location to another</i>	8.1	<i>8-a describes the symmetry of three-dimensional figures (e.g., cubes, spheres, cylinders)</i>	8.1	<i>8-a uses geometric models to solve problems relating to size and shape</i>	8.3

	5–8 Benchmark 1: Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships		5–8 Benchmark 2: Specify locations and describe spatial relationships using coordinate geometry and other representational systems		5–8 Benchmark 3: Apply transformations and use symmetry to analyze mathematical situations		5–8 Benchmark 4: Use visualization, spatial reasoning, and geometric modeling to solve problems	
			<i>8-a generates coordinate plane, including x-axis, y-axis, and origin</i>	7.1 8.1	<i>8-b identifies changes in scale</i>	7.1		

Strand: Measurement

Standard IV: Students will understand measurement systems and applications.

	5–8 Benchmark 1: Understand measurable attributes of objects and the units, systems, and processes of measurement		5–8 Benchmark 2: Apply appropriate techniques, tools, and formulas to determine measurements	
ENGAGEMENT	The student	GLPS		GLPS
	<i>1-a attends to mathematical stimuli and materials that involve sensory input (e.g., sight, sound, feel) of measurable attributes of objects</i>	7.1 8.1	<i>1-a attends to mathematical stimuli and materials that involve sensory input (e.g., sight, sound, feel) of measurement tools</i>	8.1
	<i>2-a maintains and shifts attention between two or more mathematical activities that involve sensory input (e.g., sight, sound, feel) of measurable attributes of objects</i>	7.1 8.1	<i>2-a maintains and shifts attention between two or more mathematical activities that involve sensory input (e.g., sight, sound, feel) of measurement tools</i>	8.1
	<i>2-b maintains interactions with others during math activities that involve sensory input (e.g., sight, sound, feel) of measurable attributes of objects</i>	7.1 8.1	<i>2-b maintains interactions with others during math activities that involve sensory input (e.g., sight, sound, feel) of measurement tools</i>	8.1
PRE-SYMBOLIC	The student	GLPS		GLPS
	<i>4-a places mathematical objects in order by size or weight</i>	7.3 8.1	<i>3-a matches like mathematical objects</i>	8.2
SYMBOLIC	The student	GLPS		GLPS
	<i>6-a compares objects by size, weight, or capacity</i>	7.3 8.1		
	<i>6-b selects and uses appropriate measurement units and tools to solve problems</i>	7.2		

	5–8 Benchmark 1: Understand measurable attributes of objects and the units, systems, and processes of measurement		5–8 Benchmark 2: Apply appropriate techniques, tools, and formulas to determine measurements	
EXTENDED SYMBOLIC	The student	GLPS		GLPS
	<i>7-a compares weights, capacities, geometric measures, and times within measurement systems</i>	7.3 8.1	7-a uses estimation to solve problems involving measurement	8.2
	<i>7-b tells digital time to the quarter hour</i>	7.3	8-a estimates measurements in U.S. customary units (e.g., inches, feet, yards, cups, minutes, hours)	8.2
	8-a tells analog and/or digital time to the quarter hour	7.3		

Strand: Data Analysis and Probability

Standard V: Students will understand how to formulate questions, analyze data, and determine probabilities.

	5–8 Benchmark 1: Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them		5–8 Benchmark 2: Select and use appropriate statistical methods to analyze data		5–8 Benchmark 3: Develop and evaluate inferences and predictions that are based on data		5–8 Benchmark 4: Understand and apply basic concepts of probability	
ENGAGEMENT	The student	GLPS		GLPS		GLPS		GLPS
	1-a attends to mathematical stimuli and materials that involve sensory input (e.g., sight, sound, feel) of data collection and display	7.9 8.3	1-a attends to mathematical stimuli and materials that involve sensory input (e.g., sight, sound, feel) of data collection and display	7.2 8.2 8.8	1-a attends to mathematical stimuli and materials that involve sensory input (e.g., sight, sound, feel) of data collection and display	7.2	<i>1-a attends to mathematical stimuli and materials that involve sensory input (e.g., sight, sound, feel) of probability</i>	7.2 7.5 8.2 8.5

	5–8 Benchmark 1: Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them		5–8 Benchmark 2: Select and use appropriate statistical methods to analyze data		5–8 Benchmark 3: Develop and evaluate inferences and predictions that are based on data		5–8 Benchmark 4: Understand and apply basic concepts of probability	
	2-a maintains and shifts attention between two or more mathematical activities that involve sensory input (e.g., sight, sound, feel) of data collection and display	7.9 8.3	2-a maintains and shifts attention between two or more mathematical activities that involve sensory input (e.g., sight, sound, feel) of data collection and display	7.2 8.2 8.8	2-a maintains and shifts attention between two or more mathematical activities that involve sensory input (e.g., sight, sound, feel) of data collection and display	7.2	<i>2-a maintains and shifts attention between two or more mathematical activities that involve sensory input (e.g., sight, sound, feel) of probability</i>	7.2 7.5 8.2 8.5
	2-b maintains interactions with others during math activities that involve sensory input (e.g., sight, sound, feel) of data collection and display	7.9 8.3	2-b maintains interactions with others during math activities that involve sensory input (e.g., sight, sound, feel) of data collection and display	7.2 8.2 8.8	2-b maintains interactions with others during math activities that involve sensory input (e.g., sight, sound, feel) of data collection and display	7.2	<i>2-b maintains interactions with others during math activities that involve sensory input (e.g., sight, sound, feel) of probability</i>	7.2 7.5 8.2 8.5

	5–8 Benchmark 1: Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them		5–8 Benchmark 2: Select and use appropriate statistical methods to analyze data		5–8 Benchmark 3: Develop and evaluate inferences and predictions that are based on data		5–8 Benchmark 4: Understand and apply basic concepts of probability	
PRE-SYMBOLIC	The student	GLPS		GLPS		GLPS		GLPS
			3-a matches identical graphic representations of data	7.2				
			4-a uses visual, auditory, or tactile information to solve a problem	7.3 8.4				
SYMBOLIC	The student	GLPS		GLPS		GLPS		GLPS
	<i>6-a constructs lists, tables, graphs, charts, plots, and diagrams used to display data</i>	8.3	<i>5-a answers posed questions using collected data</i>	7.3 8.4			<i>6-a generates a single event probability experiment (e.g., coin toss)</i>	8.2
			<i>6-a identifies credible sources in the information-gathering process</i>	7.6 8.7			6-b describes and predicts results of a probability experiment (e.g., heads/tails)	8.4

	5–8 Benchmark 1: Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them		5–8 Benchmark 2: Select and use appropriate statistical methods to analyze data		5–8 Benchmark 3: Develop and evaluate inferences and predictions that are based on data		5–8 Benchmark 4: Understand and apply basic concepts of probability	
			<i>6-b identifies appropriate conclusion(s) based on collected data</i>	8.4				
EXTENDED SYMBOLIC	The student	GLPS		GLPS		GLPS		GLPS
	8-a explains information provided in a list, table, graph, chart, plot, or diagram	8.3	<i>7-a displays data in a variety of formats (e.g., lists, tables, graphs, charts, plots, diagrams)</i>	7.2	<i>7-a analyzes data to make accurate inferences</i>	7.2	<i>7-a uses data to estimate the probability of future events</i>	7.5
	<i>8-b identifies the mean, median, and mode of a simple number set (e.g., 1, 3, 1, 4, 1)</i>	7.3 8.4	<i>8-a calculates the range of a given data set (e.g., 1, 3, 1, 4, 1)</i>	7.1	<i>8-a compares expected results with actual results in a simple experiment</i>	8.4	<i>8-a identifies examples of events having a probability of one or zero</i>	7.2
			<i>8-b analyzes data to make decisions</i>	8.3			<i>8-b uses probability to make predictions about real-world events</i>	8.4

	5–8 Benchmark 1: Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them		5–8 Benchmark 2: Select and use appropriate statistical methods to analyze data		5–8 Benchmark 3: Develop and evaluate inferences and predictions that are based on data		5–8 Benchmark 4: Understand and apply basic concepts of probability	
			8-c uses appropriate technology to display data as lists, tables, graphs, charts, plots, and diagrams	8.8				