Arizona's College and Career Ready Standards
Mathematics

Crosswalks: AZCCRS / 2008

Eighth Grade

ARIZONA DEPARTMENT OF EDUCATION
High Academic Standards for Students
State Board Approved June 2010
November 2013 Publication

The Number System (NS)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Know that there are numbers that are not rational, and approximate them by rational numbers.	8.NS.A.1	Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.	M08-S1C1-02	Classify real numbers as rational or irrational.
			M08-S1C1-03	Model the relationship between the subsets of the real number system.
	8.NS.A.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., π^2). *For example, by truncating the decimal expansion of v2, show that v2 is between 1and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.*	M06-S1C3-01	Use benchmarks as meaningful points of comparison for rational numbers.
			M07-S1C3-01	Estimate and apply benchmark numbers for rational number and common irrational numbers.
			M07-S1C3-03	Estimate square roots of numbers less than 1000 by locating them between two consecutive whole numbers.
			M08-S1C3-02	Estimate the location of rational and common irrational numbers on a number line.
			MHS-S1C3-01	Determine rational approximations of irrational numbers.
			MHS-S1C3-04	Estimate the location of the rational or irrational numbers on a number line.

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Expressions and Equations (EE)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Work with radicals and integer exponents.	8.EE.A.1	Know and apply the properties of integer exponents to generate equivalent numerical expressions. *For example,* $3^2 \times 3^{-5} = 3^{-3} = 1/3^3 = 1/27$.	M08-S1C2-05	Simplify numerical expressions using the order of operations that include grouping symbols, square roots, cube roots, absolute values, and positive exponents. (positive exponents only)
			MHS-S1C2-01	Solve word problems involving absolute value, powers, roots, and scientific notation.
			MHS-S1C2-03	Calculate powers and roots of rational and irrational numbers.
	8.EE.A.2	Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that √2 is irrational.	M06-S1C1-06	Express the inverse relationships between exponents and roots for perfect squares and cubes.
			M08-S1C1-02	Classify real numbers as rational or irrational.
	8.EE.A.3	Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. *For example, estimate the population of the United States as* 3×10^8 *and the population of the world as* 7×10^9*, and determine that the world population is more than 20 times larger.*	M07-S1C2-04	Represent and interpret numbers using scientific notation (positive exponents only).
			M08-S1C2-04	Convert standard notation to scientific notation and vice versa (include positive and negative exponents).

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Expressions and Equations (EE)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Work with radicals and integer exponents.	8.EE.A.4	Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.	M08-S1C2-04	Convert standard notation to scientific notation and vice versa (include positive and negative exponents).
			MHS-S1C2-04	Compute using scientific notation.
Understand the connections between proportional relationships, lines, and linear equations	8.EE.B.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.*	M08-S3C2-01	Sketch and interpret a graph that models a given context; describe a context that is modeled by a given graph.
			M08-S3C2-05	Demonstrate that proportional relationships are linear using equations, graphs, or tables.
			M08-S3C3-04	Translate between different representations of linear equations using symbols, graphs, tables, or written descriptions.
			M08-S3C4-01	Interpret the relationship between a linear equation and its graph, identifying and computing slope and intercepts. (missing comparison of 2 different graphs and/or equations)

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Expressions and Equations (EE)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Understand the connections between proportional relationships, lines, and linear equations	8.EE.B.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.*	M08-S5C2-12	Make, validate, and justify conclusions and generalizations about linear relationships.
	8.EE.B.6	Use similar triangles to explain why the slope *m* is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at *b*.	M08-S3C3-04	Translate between different representations of linear equations using symbols, graphs, tables, or written descriptions.
			M08-S3C4-01	Interpret the relationship between a linear equation and its graph, identifying and computing slope and intercepts. (does not specifically address similar triangles)
			M08-S5C2-12	Make, validate, and justify conclusions and generalizations about linear relationships.

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Expressions and Equations (EE)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Analyze and solve linear equations and pairs of simultaneous linear equations.	8.EE.C.7	Solve linear equations in one variable.		
		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).	M07-S3C3-05	Create and solve two-step equations that can be solved using inverse operations with rational numbers.
			M08-S3C3-01	Write or identify algebraic expressions, equations, or inequalities that represent a situation.
		b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.	M07-S3C3-03	Solve multi-step equations using inverse properties with rational numbers.
			M07-S3C3-05	Create and solve two-step equations that can be solved using inverse operations with rational numbers.
			M08-S3C3-03	Analyze situations, simplify, and solve problems involving linear equations and inequalities using the properties of the real number system.
	8.EE.C.8	Analyze and solve pairs of simultaneous linear equations.		
		a. Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.	MHS-S3C2-05	Recognize and solve problems that can be modeled using a system of two equations in two variables.

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Expressions and Equations (EE)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Analyze and solve linear equations and pairs of simultaneous linear equations.	8.EE.C.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.*	M08-S1C3-01	Make estimates appropriate to a given situation.
			MHS-S3C3-07	Solve systems of two linear equations in two variables.
			MHS-S4C3-07	Determine the solution to a system of linear equations in two variables from the graphs of the equations.
		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.*	MHS-S3C2-05	Recognize and solve problems that can be modeled using a system of two equations in two variables.
			MHS-S3C3-07	Solve systems of two linear equations in two variables.

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Functions (F)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Define, evaluate, and compare functions.	8.F.A.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. (Function notation is not required in Grade 8.)	M08-S3C2-02	Determine if a relationship represented by a graph or table is a function.
	8.F.A.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.*	*	
	8.F.A.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.*	M08-S3C2-04	Identify functions as linear or nonlinear and contrast distinguishing properties of functions using equations, graphs, or tables.
			M08-S5C2-12	Make, validate, and justify conclusions and generalizations about linear relationships.

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Functions (F)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Use functions to model relationships between quantities.	8.F.B.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.	M07-S3C4-01	Use graphs and tables to model and analyze change. (analysis of change)
			M08-S3C1-01	Recognize, describe, create, and analyze numerical and geometric sequences using tables, graphs, words, or symbols; make conjectures about these sequences.
			M08-S3C2-03	Write the rule for a simple function using algebraic notation. (writing the rule)
			M08-S3C2-04	Identify functions as linear or nonlinear and contrast distinguishing properties of functions using equations, graphs, or tables. (properties of functions)
			M08-S3C3-04	Translate between different representations of linear equations using symbols, graphs, tables, or written descriptions. (different forms – equation/graphs)
			M08-S3C4-01	Interpret the relationship between a linear equation and its graph, identifying and computing slope and intercepts. (slope and rate of change)
			M08-S5C2-12	Make, validate, and justify conclusions and generalizations about linear relationships.

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Functions (F)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Use functions to model relationships between quantities.	8.F.B.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.	M08-S3C2-01	Sketch and interpret a graph that models a given context; describe a context that is modeled by a given graph.
			M08-S3C2-04	Identify functions as linear or nonlinear and contrast distinguishing properties of functions using equations, graphs, or tables.

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Geometry (G)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Understand congruence and similarity using physical models, transparencies, or geometry software.	8.G.A.1	Verify experimentally the properties of rotations, reflections, and translations:	M07-S4C2-01	Model the result of a double transformation (translations or reflections) of a 2-dimensional figure on a coordinate plane using all four quadrants.
			M08-S4C2-01	Model the result of rotations in multiples of 45 degrees of a 2-dimensional figure about the origin.
			M08-S4C2-02	Describe the transformations that create a given tessellation.
		a. Lines are taken to lines, and line segments to line segments of the same length.		Aligned P.O.s do not specifically address line segments, angles, parallel lines. Rotations, reflections and translations of figures are specifically addressed.
		b. Angles are taken to angles of the same measure.		
		c. Parallel lines are taken to parallel lines.		
	8.G.A.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.	M07-S4C1-05	Identify corresponding parts of congruent figures.
			M07-S4C2-01	Model the result of a double transformation (translations or reflections) of a 2-dimensional figure on a coordinate plane using all four quadrants.
			M08-S4C2-01	Model the result of rotations in multiples of 45 degrees of a 2-dimensional figure about the origin.
			M08-S4C2-02	Describe the transformations that create a given tessellation.

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Geometry (G)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Understand congruence and similarity using physical models, transparencies, or geometry software.	8.G.A.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.	M06-S4C2-01	Identify a simple translation or reflection and model its effect on a 2-dimensional figure on a coordinate plane using all four quadrants.
	8.G.A.3	Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.	M06-S4C2-01	Identify a simple translation or reflection and model its effect on a 2-dimensional figure on a coordinate plane using all four quadrants.
			M07-S4C2-01	Model the result of a double transformation (translations or reflections) of a 2-dimensional figure on a coordinate plane using all four quadrants.
			M08-S4C2-01	Model the result of rotations in multiples of 45 degrees of a 2-dimensional figure about the origin.
			MHS-S4C2-01	Determine whether a transformation of a 2-dimensional figure on a coordinate plane represents a translation, reflection, rotation, or dilation and whether congruence is preserved.
			MHS-S4C2-02	Determine the new coordinates of a point when a single transformation is performed on a 2-dimensional figure.
			MHS-S4C2-03	Sketch and describe the properties of a 2-dimensional figure that is the result of two or more transformations.
			MHS-S4C2-04	Determine the effects of a single transformation on linear or area measurements of a 2-dimensional figure.

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Geometry (G)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Understand congruence and similarity using physical models, transparencies, or geometry software.	8.G.A.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.	M07-S4C2-01	Model the result of a double transformation (translations or reflections) of a 2-dimensional figure on a coordinate plane using all four quadrants.
			M08-S4C1-03	Use proportional reasoning to determine congruence and similarity of triangles.
			M08-S4C2-01	Model the result of rotations in multiples of 45 degrees of a 2-dimensional figure about the origin.
			M08-S4C4-02	Solve geometric problems using ratios and proportions.
			MHS-S4C2-01	Determine whether a transformation of a 2-dimensional figure on a coordinate plane represents a translation, reflection, rotation, or dilation and whether congruence is preserved.
			MHS-S4C2-02	Determine the new coordinates of a point when a single transformation is performed on a 2-dimensional figure.
			MHS-S4C2-03	Sketch and describe the properties of a 2-dimensional figure that is the result of two or more transformations.
			MHS-S4C2-04	Determine the effects of a single transformation on linear or area measurements of a 2-dimensional figure.

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Geometry (G)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Understand congruence and similarity using physical models, transparencies, or geometry software.	8.G.A.5	Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. *For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.*	M05-S4C1-02	Solve problems by understanding and applying the property that the sum of the interior angles of a triangle is 180˚.
			M07-S4C1-02	Analyze and determine relationships between angles created by parallel lines cut by a transversal.
			M08-S4C1-03	Use proportional reasoning to determine congruence and similarity of triangles.
Understand and apply the Pythagorean Theorem.	8.G.B.6	Explain a proof of the Pythagorean Theorem and its converse.	M08-S5C2-11	Identify simple valid arguments using *if… then* statements.
			M08-S5C2-13	Verify the Pythagorean Theorem using a valid argument. (does not address converse)
	8.G.B.7	Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.	M08-S4C1-04	Use the Pythagorean Theorem to solve problems (does not address 3D).
	8.G.B.8	Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	M08-S4C3-02	Use the Pythagorean Theorem to find the distance between two points in the coordinate plane.
			M08-S5C2-13	Verify the Pythagorean Theorem using a valid argument.
			MHS-S4C3-02	Illustrate the connection between the distance formula and the Pythagorean Theorem.

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Geometry (G)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres	8.G.C.9	Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.	M08-S4C4-03	Calculate the surface area and volume of rectangular prisms, right triangular prisms, and cylinders.
			MHS-S4C4-05	Calculate the surface area and volume of 3-dimensional figures and solve for missing measures.

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Statistics and Probability (SP)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Investigate patterns of association in bivariate data.	8.SP.A.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.	M07-S2C1-01	Solve problems by selecting, constructing, and interpreting displays of data including multi-line graphs and scatterplots.
			M07-S2C1-02	Interpret trends in a data set, estimate values for missing data, and predict values for points beyond the range of the data set.
			M07-S2C1-03	Identify outliers and determine their effect on mean, median, mode, and range.
			M08-S2C1-01	Solve problems by selecting, constructing, interpreting, and calculating with displays of data, including box and whisker plots and scatterplots.
	8.SP.A.2	Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.	M08-S2C1-01	Solve problems by selecting, constructing, interpreting, and calculating with displays of data, including box and whisker plots and scatterplots.
	8.SP.A.3	Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. *For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height*.	M08-S3C3-01	Write or identify algebraic expressions, equations, or inequalities that represent a situation.
			M08-S3C3-04	Translate between different representations of linear equations using symbols, graphs, tables, or written descriptions.

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Statistics and Probability (SP)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
Investigate patterns of association in bivariate data.	8.SP.A.3	Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. *For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height*.	M08-S3C4-01	Interpret the relationship between a linear equation and its graph, identifying and computing slope and intercepts.
			M08-S5C2-12	Make, validate, and justify conclusions and generalizations about linear relationships.
			MHS-S2C1-03	Display data, including paired data, as lists, tables, matrices, and plots with or without technology; make predictions and observations about patterns or departures from patterns.
	8.SP.A.4	Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. *For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?*	M08-S2C1-02	Make inferences by comparing the same summary statistic for two or more data sets.
			MHS-S2C1-08	Design simple experiments or investigations and collect data to answer questions.

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Standards for Mathematical Practice – (MP)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
	8.MP.1	Make sense of problems and persevere in solving them.	M08-S5C2-01	Analyze a problem situation to determine the question(s) to be answered.
			M08-S5C2-02	Analyze and compare mathematical strategies for efficient problem solving; select and use one or more strategies to solve a problem.
			M08-S5C2-03	Identify relevant, missing, and extraneous information related to the solution to a problem.
			M08-S5C2-04	Represent a problem situation using multiple representations, describe the process used to solve the problem, and verify the reasonableness of the solution.
			M08-S5C2-05	Apply a previously used problem-solving strategy in a new context.
			M08-S5C2-06	Communicate the answer(s) to the question(s) in a problem using appropriate representations, including symbols and informal and formal mathematical language.
			M08-S5C2-07	Isolate and organize mathematical information taken from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning.
			M08-S5C2-08	Describe when to use proportional reasoning to solve a problem.
			M08-S5C2-09	Make and test conjectures based on information collected from explorations and experiments.
	8.MP.2	Reason abstractly and quantitatively.	M08-S5C2-07	Isolate and organize mathematical information taken from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning.
			M08-S5C2-08	Describe when to use proportional reasoning to solve a problem.

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Standards for Mathematical Practice – (MP)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
	8.MP.3	Construct viable arguments and critique the reasoning of others.	M08-S5C2-04	Represent a problem situation using multiple representations, describe the process used to solve the problem, and verify the reasonableness of the solution.
			M08-S5C2-07	Isolate and organize mathematical information taken from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning.
			M08-S5C2-09	Make and test conjectures based on information collected from explorations and experiments.
	8.MP.4	Model with mathematics.	M08-S5C2-02	Analyze and compare mathematical strategies for efficient problem solving; select and use one or more strategies to solve a problem.
			M08-S5C2-04	Represent a problem situation using multiple representations, describe the process used to solve the problem, and verify the reasonableness of the solution.
			M08-S5C2-05	Apply a previously used problem-solving strategy in a new context.
			M08-S5C2-06	Communicate the answer(s) to the question(s) in a problem using appropriate representations, including symbols and informal and formal mathematical language.
			M08-S5C2-07	Isolate and organize mathematical information taken from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning.
			M08-S5C2-08	Describe when to use proportional reasoning to solve a problem.
	8.MP.5	Use appropriate tools strategically.	M08-S5C2-02	Analyze and compare mathematical strategies for efficient problem solving; select and use one or more strategies to solve a problem.
			M08-S5C2-09	Make and test conjectures based on information collected from explorations and experiments.
	8.MP.6	Attend to precision.	M08-S5C2-06	Communicate the answer(s) to the question(s) in a problem using appropriate representations, including symbols and informal and formal mathematical language.

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Standards for Mathematical Practice – (MP)				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
	8.MP.7	Look for and make use of structure.	M08-S5C2-07	Isolate and organize mathematical information taken from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning.
			M08-S5C2-09	Make and test conjectures based on information collected from explorations and experiments.
	8.MP.8	Look for and express regularity in repeated reasoning.	M08-S5C2-04	Represent a problem situation using multiple representations, describe the process used to solve the problem, and verify the reasonableness of the solution.

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Removed or Moved 2008 Performance Objectives				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
	6.NS.7	MOVED TO GRADE 6	M08-S1C1-01	Compare and order real numbers including very large and small integers, and decimals and fractions close to zero.
	7.NS.1c	MOVED TO GRADE 7	M08-S1C1-04	Model and solve problems involving absolute values.
	6.NS.4	MOVED TO GRADE 6	M08-S1C2-01	Solve problems with factors, multiples, divisibility or remainders, prime numbers, and composite numbers.
	5.NF.5b	MOVED TO GRADE 5	M08-S1C2-02	Describe the effect of multiplying and dividing a rational number by • a number less than zero, • a number between zero and one, • one, and • a number greater than one.
	7.RP.3	MOVED TO GRADE 7	M08-S1C2-03	Solve problems involving percent increase, percent decrease, and simple interest rates.
	7.SP.3	MOVED TO GRADE 7	M08-S2C1-03	Describe how summary statistics relate to the shape of the distribution.
		REMOVED	M08-S2C1-04	Determine whether information is represented effectively and appropriately given a graph or a set of data by identifying sources of bias and compare and contrast the effectiveness of different representations of data.
	7.SP.2	MOVED TO GRADE 7	M08-S2C1-05	Evaluate the design of an experiment.
	7.SP.8a	MOVED TO GRADE 7	M08-S2C2-01	Determine theoretical and experimental conditional probabilities in compound probability experiments.
	7.SP.7b	MOVED TO GRADE 7	M08-S2C2-02	Interpret probabilities within a given context and compare the outcome of an experiment to predictions made prior to performing the experiment.
	7.SP.8b	MOVED TO GRADE 7	M08-S2C2-03	Use all possible outcomes (sample space) to determine the probability of dependent and independent events.
		REMOVED	M08-S2C3-01	Represent, analyze, and solve counting problems with or without ordering and repetitions.
		REMOVED	M08-S2C3-02	Solve counting problems and represent counting principles algebraically including factorial notation.
		REMOVED	M08-S2C4-01	Use directed graphs to solve problems.
	6.EE.2c	MOVED TO GRADE 6	M08-S3C3-02	Evaluate an expression containing variables by substituting rational numbers for the variables.

* This standard is new to the Arizona College and Career Ready Standards (AZCCRS)

Removed or Moved 2008 Performance Objectives				
CLUSTER	**AZCCRS**	**ITEM DESCRIPTION**	**2008 PO**	**ITEM DESCRIPTION**
	6.EE.8	MOVED TO GRADE 6	M08-S3C3-05	Graph an inequality on a number line.
	6.RP.3 a - d 7.RP.1	REDISTRIBUTED TO GRADE 6 AND 7	M08-S3C4-02	Solve problems involving simple rates.
	HS.G-C.2	MOVED TO HIGH SCHOOL	M08-S4C1-01	Identify the attributes of circles: radius, diameter, chords, tangents, secants, inscribed angles, central angles, intercepted arcs, circumference, and area.
	7.G.3	MOVED TO GRADE 7	M08-S4C1-02	Predict results of combining, subdividing, and changing shapes of plane figures and solids.
		REMOVED	M08-S4C2-03	Identify lines of symmetry in plane figures or classify types of symmetries of 2-dimensional figures.
	HS.G-GPE.6	MOVED TO HIGH SCHOOL	M08-S4C3-01	Make and test a conjecture about how to find the midpoint between any two points in the coordinate plane.
		REMOVED	M08-S4C4-01	Solve problems involving conversions within the same measurement system.
	HS.N-Q.1	MOVED TO HIGH SCHOOL	M08-S5C1-01	Create an algorithm to solve problems involving indirect measurements, using proportional reasoning, dimensional analysis, and the concepts of density and rate.
		REMOVED	M08-S5C2-10	Solve logic problems involving multiple variables, conditional statements, conjectures, and negation using words, charts, and pictures.

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