

**MATHEMATICS CROSSWALK**  
**2010 MATHEMATICS STANDARD TO 2008 MATHEMATICS STANDARD**  
**GRADE 7**

<b>Ratios and Proportional Relationships – (RP)</b>					
<b>CLUSTER</b>	<b>2010 STANDARD</b>	<b>ITEM DESCRIPTION</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>	
<b>Analyze proportional relationships and use them to solve real-world and mathematical problems.</b>	7.RP.1	Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. <i>For example, if a person walks <math>\frac{1}{2}</math> mile in each <math>\frac{1}{4}</math> hour, compute the unit rate as the complex fraction <math>\frac{1/2}{1/4}</math> miles per hour, equivalently 2 miles per hour.</i>	M05-S1C1-05	Use ratios and unit rates to model, describe and extend problems in context.	
			M07-S1C1-01	Recognize and convert between expressions for positive and negative rational numbers, including fractions, decimals, percents, and ratios.	
			M07-S1C2-03	Solve problems involving percentages, ratio and proportion, including tax, discount, tips, and part/whole relationships. (no complex ratios)	
			M08-S3C4-02	Solve problems involving simple rates.	
	7.RP.2	Recognize and represent proportional relationships between quantities.  a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.  b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.			
			M07-S3C2-01	Use a table of values to graph an equation or proportional relationship; describe the graph's characteristics.	
			M05-S1C1-05	Use ratios and unit rates to model, describe and extend problems in context.	
			M07-S3C1-01	Recognize, describe, create, and analyze numerical and geometric sequences using tables or graphs; make conjectures about these sequences.	
			M07-S3C2-01	Use a table of values to graph an equation or proportional relationship; describe the graph's characteristics.	

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<b>Analyze proportional relationships and use them to solve real-world and mathematical problems.</b>	7.RP.2	b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.	M07-S3C4-01	Use graphs and tables to model and analyze change.
		c. Represent proportional relationships by equations. <i>For example, if total cost <math>t</math> is proportional to the number <math>n</math> of items purchased at a constant price <math>p</math>, the relationship between the total cost and the number of items can be expressed as <math>t = pn</math>.</i>	M08-S3C2-03	Write the rule for a simple function using algebraic notation.
			M08-S3C2-05	Demonstrate that proportional relationships are linear using equations, graphs, or tables.
		d. Explain what a point $(x, y)$ on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where $r$ is the unit rate.	*	
	7.RP.3	Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.	M07-S1C2-03	Solve problems involving percentages, ratio and proportion, including tax, discount, tips, and part/whole relationships.
			M08-S1C2-03	Solve problems involving percent increase, percent decrease, and simple interest rates.

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<b>The Number System (NS)</b>				
<b>CLUSTER</b>	<b>2010 STANDARD</b>	<b>ITEM DESCRIPTION</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>
<b>Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.</b>	7.NS.1	Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.	M06-S1C2-01	Apply and interpret the concepts of addition and subtraction with integers using models.
		a. Describe situations in which opposite quantities combine to make 0. <i>For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.</i>	*	
		b. Understand $p + q$ as the number located a distance $ q $ from $p$ , in the positive or negative direction depending on whether $q$ is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.	M06-S1C1-05	Express that a number's distance from zero on the number line is its absolute value.
			M07-S1C1-04	Model and solve simple problems involving absolute value.
		c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$ . Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.	M08-S1C1-04	Model and solve problems involving absolute values.
			MHS-S1C1-03	Express that the distance between two numbers is the absolute value of their difference.

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<b>Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.</b>	7.NS.1	d. Apply properties of operations as strategies to add and subtract rational numbers.	M07-S1C2-01	Add, subtract, multiply, and divide integers.	
			M07-S1C2-05	Simplify numerical expressions using the order of operations and appropriate mathematical properties.	
	7.NS.2	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.			
		a.	Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.	M07-S1C2-01	Add, subtract, multiply, and divide integers.
		b.	Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If $p$ and $q$ are integers, then $-(p/q) = (-p)/q = p/(-q)$ . Interpret quotients of rational numbers by describing real-world contexts.	M07-S1C2-01	Add, subtract, multiply, and divide integers.
		c.	Apply properties of operations as strategies to multiply and divide rational numbers.	M07-S1C2-02	Solve problems with rational numbers and appropriate operations using exact answers or estimates.

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<b>Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.</b>	7.NS.2	d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.	M07-S1C1-01	Recognize and convert between expressions for positive and negative rational numbers, including fractions, decimals, percents, and ratios.
	7.NS.3	Solve real-world and mathematical problems involving the four operations with rational numbers. (Computations with rational numbers extend the rules for manipulating fractions to complex fractions.)	M07-S1C1-01	Recognize and convert between expressions for positive and negative rational numbers, including fractions, decimals, percents, and ratios.
			M07-S1C2-02	Solve problems with rational numbers and appropriate operations using exact answers or estimates.

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<b>Expressions and Equations (EE)</b>				
<b>CLUSTER</b>	<b>2010 STANDARD</b>	<b>ITEM DESCRIPTION</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>
<b>Use properties of operations to generate equivalent expressions.</b>	7.EE.1	Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	M06-S1C2-06	Apply the commutative, associative, distributive, and identity properties to evaluate numerical expressions involving whole numbers.
			M06-S1C2-07	Simplify numerical expressions (involving fractions, decimals, and exponents) using the order of operations with or without grouping symbols.
			M07-S1C2-05	Simplify numerical expressions using the order of operations and appropriate mathematical properties.
			M08-S3C3-03	Analyze situations, simplify, and solve problems involving linear equations and inequalities using the properties of the real number system. (not factoring and expansion)
			MHS-S3C3-08	Simplify and evaluate polynomials, rational expressions, expressions containing absolute value, and radicals.
	7.EE.2	Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, <math>a + 0.05a = 1.05a</math> means that “increase by 5%” is the same as “multiply by 1.05.”</i>	M07-S3C3-01	Write a single variable algebraic expression or one-step equation given a contextual situation.
			M08-S3C3-01	Write or identify algebraic expressions, equations, or inequalities that represent a situation.

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<b>CLUSTER</b>	<b>2010 STANDARD</b>	<b>ITEM DESCRIPTION</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>
<b>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.</b>	7.EE.3	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional <math>\frac{1}{10}</math> of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar <math>9\frac{3}{4}</math> inches long in the center of a door that is <math>27\frac{1}{2}</math> inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i>	M06-S3C3-02	Create and solve two-step equations that can be solved using inverse properties with fractions and decimals.
			M07-S1C3-02	Make estimates appropriate to a given situation.
			M07-S3C3-03	Solve multi-step equations using inverse properties with rational numbers.

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<b>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.</b>	7.EE.4	Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.		
		a. Solve word problems leading to equations of the form $px+q=r$ and $p(x+q)=r$ , where $p$ , $q$ , and $r$ are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i>	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-S3C3-01	Write or identify algebraic expressions, equations, or inequalities that represent a situation.
			M08-S3C3-03	Analyze situations, simplify, and solve problems involving linear equations and inequalities using the properties of the real number system.

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<b>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.</b>	7.EE.4	b. Solve word problems leading to inequalities of the form $px+q>r$ or $px+q < r$ , where $p$ , $q$ , and $r$ are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. <i>For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.</i>	M07-S3C3-06	Create and solve one-step inequalities with whole numbers. (one step only)
			M08-S3C3-01	Write or identify algebraic expressions, equations, or inequalities that represent a situation.
			M08-S3C3-03	Analyze situations, simplify, and solve problems involving linear equations and inequalities using the properties of the real number system.

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<b>Geometry (G)</b>				
<b>CLUSTER</b>	<b>2010 STANDARD</b>	<b>ITEM DESCRIPTION</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>
<b>Draw, construct, and describe geometrical figures and describe the relationships between them.</b>	7.G.1	Solve problems involving scale drawings of geometric figures, such as computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	M06-S4C4-03	Estimate the measure of objects using a scale drawing or map.
			M07-S4C4-04	Determine actual lengths based on scale drawings or maps. (only length)
			M08-S4C4-02	Solve geometric problems using ratios and proportions.
	7.G.2	Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	M05-S4C1-01	Draw and label 2-dimensional figures given specific attributes including angle measure and side length. (no specific focus on triangles)
			M07-S4C4-07	Measure to the appropriate degree of accuracy and justify reasoning.
	7.G.3	Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	M08-S4C1-02	Predict results of combining, subdividing, and changing shapes of plane figures and solids.
<b>Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.</b>	7.G.4	Know the formulas for the area and circumference of a circle and solve problems; give an informal derivation of the relationship between the circumference and area of a circle.	M06-S4C1-01	Define $\pi$ (pi) as the ratio between the circumference and diameter of a circle and explain the relationship among the diameter, radius, and circumference.
			M07-S4C4-01	Solve problems involving the circumference and area of a circle by calculating and estimating.
			M07-S5C2-11	Use manipulatives and other modeling techniques to defend $\pi$ (pi) as a ratio of circumference to diameter.

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<b>Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.</b>	7.G.5	Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.	M06-S4C1-02	Solve problems using properties of supplementary, complementary, and vertical angles.
			M07-S4C1-02	Analyze and determine relationships between angles created by parallel lines cut by a transversal.
			M07-S3C3-05	Create and solve two-step equations that can be solved using inverse operations with rational numbers.
	7.G.6	Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	M07-S4C1-03	Draw and classify 3-dimensional figures with appropriate labels showing specified attributes of parallelism, congruence, perpendicularity, and symmetry.
			M07-S4C4-03	Calculate the area and perimeter of composite 2-dimensional figures. (areas)
			M07-S4C4-05	Create a net to calculate the surface area of a given solid. (nets)
			M07-S4C4-06	Identify the appropriate unit of measure to compute the volume of an object and justify reasoning. (volume)
			M08-S4C4-03	Calculate the surface area and volume of rectangular prisms, right triangular prisms, and cylinders. (surface area and volume)

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<b>Statistics and Probability (SP)</b>				
<b>CLUSTER</b>	<b>2010 STANDARD</b>	<b>ITEM DESCRIPTION</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>
<b>Use random sampling to draw inferences about a population.</b>	7.SP.1	Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	M07-S2C1-04	Distinguish between a simple random and non-random sample.
	7.SP.2	Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. <i>For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.</i>	M08-S2C1-02	Make inferences by comparing the same summary statistic for two or more data sets.
			M08-S2C1-05	Evaluate the design of an experiment.

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<b>Draw informal comparative inferences about two populations.</b>	7.SP.3	Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. <i>For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.</i>	M08-S2C1-01	Solve problems by selecting, constructing, interpreting, and calculating with displays of data, including box and whisker plots and scatterplots.
			M08-S2C1-02	Make inferences by comparing the same summary statistic for two or more data sets.
			M08-S2C1-03	Describe how summary statistics relate to the shape of the distribution.
	7.SP.4	Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. <i>For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.</i>	M06-S2C1-03	Use extreme values, mean, median, mode, and range to analyze and describe the distribution of a given data set. (measures of center and variability)
			M08-S2C1-02	Make inferences by comparing the same summary statistic for two or more data sets.
			MHS-S2C1-04	Make inferences by comparing data sets using one or more summary statistics.
			MHS-S2C1-05	Determine which measure of center is most appropriate in a given situation and explain why.

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<b>Investigate chance processes and develop, use, and evaluate probability models.</b>	7.SP.5	Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around $\frac{1}{2}$ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.	M04-S2C2-01	Describe elements of theoretical probability by listing or drawing all possible outcomes of a given event and predicting the outcome using word and number benchmarks.
			M05-S2C2-01	Describe the theoretical probability of events and represent the probability as a fraction, decimal, or percent.
	7.SP.6	Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. <i>For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.</i>	M05-S2C2-02	Explore probability when performing experiments by <ul style="list-style-type: none"> <li>• predicting the outcome,</li> <li>• recording the data,</li> <li>• comparing outcomes of the experiment to predictions, and</li> <li>• comparing the results of multiple repetitions of the experiment.</li> </ul>
			M07-S2C2-03	Compare the results of multiple repetitions of the same probability experiment to the theoretical probability.

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<b>Investigate chance processes and develop, use, and evaluate probability models.</b>	7.SP.7	Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.		
		a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. <i>For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.</i>	M06-S2C2-01	Use data collected from multiple trials of a single event to form a conjecture about the theoretical probability.
			M06-S2C2-02	Use theoretical probability to <ul style="list-style-type: none"> <li>• predict experimental outcomes,</li> <li>• compare the outcome of the experiment to the prediction, and</li> <li>• replicate the experiment and compare results.</li> </ul>

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<b>Investigate chance processes and develop, use, and evaluate probability models.</b>	7.SP.7	b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. <i>For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?</i>	M05-S2C2-02	Explore probability when performing experiments by <ul style="list-style-type: none"> <li>• predicting the outcome,</li> <li>• recording the data,</li> <li>• comparing outcomes of the experiment to predictions, and</li> <li>• comparing the results of multiple repetitions of the experiment.</li> </ul>
			M06-S2C2-02	Use theoretical probability to <ul style="list-style-type: none"> <li>• predict experimental outcomes,</li> <li>• compare the outcome of the experiment to the prediction, and</li> <li>• replicate the experiment and compare results.</li> </ul>
			M07-S2C2-02	Experiment with two different events to determine whether the two events are dependent or independent of each other.
			M07-S2S2-03	Compare the results of multiple repetitions of the same probability experiment to the theoretical probability.
			M07-S2C2-04	Compare probabilities to determine fairness in experimental situations.
			M08-S2C2-02	Interpret probabilities within a given context and compare the outcome of an experiment to predictions made prior to performing the experiment.
			MHS-S2C2-05	Use concepts and formulas of area to calculate geometric probabilities.

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<b>Investigate chance processes and develop, use, and evaluate probability models.</b>	7.SP.8	Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.		
		a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.	M07-S2C2-01	Determine conditional probabilities (experimental) in compound probability experiments.
			M07-S2C3-01	Analyze relationships among the tree diagrams where items repeat and do not repeat; make numerical connections to the multiplication principle of counting.
			M08-S2C2-01	Determine theoretical and experimental conditional probabilities in compound probability experiments.
		b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space which compose the event.	M06-S2C2-03	Determine all possible outcomes (sample space) of a given situation using a systematic approach.
			M07-S2C2-01	Determine conditional probabilities (experimental) in compound probability experiments.
			M07-S2C3-01	Analyze relationships among the tree diagrams where items repeat and do not repeat; make numerical connections to the multiplication principle of counting.
			M08-S2C2-03	Use all possible outcomes (sample space) to determine the probability of dependent and independent events.

\* This standard is new to the 2010 Mathematics Standard Articulated by Grade Level.  
 Arizona Department of Education: Standards and Assessment Division

**MATHEMATICS CROSSWALK**  
**2010 MATHEMATICS STANDARD TO 2008 MATHEMATICS STANDARD**  
**GRADE 7**

<b>Statistics and Probability (SP)</b>				
<b>CLUSTER</b>	<b>2010 STANDARD</b>	<b>ITEM DESCRIPTION</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>
<b>Investigate chance processes and develop, use, and evaluate probability models.</b>	7.SP.8	c. Design and use a simulation to generate frequencies for compound events. <i>For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?</i>	M07-S2C2-01	Determine conditional probabilities (experimental) in compound probability experiments.

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**MATHEMATICS CROSSWALK**  
**2010 MATHEMATICS STANDARD TO 2008 MATHEMATICS STANDARD**  
**GRADE 7**

<b>Standards for Mathematical Practice – (MP)</b>				
<b>CLUSTER</b>	<b>2010 STANDARD</b>	<b>ITEM DESCRIPTION</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>
	7.MP.1	Make sense of problems and persevere in solving them.	M07-S5C2-01	Analyze a problem situation to determine the question(s) to be answered.
			M07-S5C2-02	Analyze and compare mathematical strategies for efficient problem solving; select and use one or more strategies to solve a problem.
			M07-S5C2-03	Identify relevant, missing, and extraneous information related to the solution to a problem
			M07-S5C2-04	Represent a problem situation using multiple representations, describe the process used to solve the problem, and verify the reasonableness of the solution.
			M07-S5C2-05	Apply a previously used problem-solving strategy in a new context.
			M07-S5C2-06	Communicate the answer(s) to the question(s) in a problem using appropriate representations, including symbols and informal and formal mathematical language.
			M07-S5C2-07	Isolate and organize mathematical information taken from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning.
			M07-S5C2-08	Make and test conjectures based on information collected from explorations and experiments.
	7.MP.2	Reason abstractly and quantitatively.	M07-S5C2-07	Isolate and organize mathematical information taken from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning.

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**GRADE 7**

<b>Standards for Mathematical Practice – (MP)</b>				
<b>CLUSTER</b>	<b>2010 STANDARD</b>	<b>ITEM DESCRIPTION</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>
	7.MP.3	Construct viable arguments and critique the reasoning of others.	M07-S5C2-04	Represent a problem situation using multiple representations, describe the process used to solve the problem, and verify the reasonableness of the solution.
			M07-S5C2-07	Isolate and organize mathematical information taken from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning.
			M07-S5C2-08	Make and test conjectures based on information collected from explorations and experiments.
	7.MP.4	Model with mathematics.	M07-S5C2-02	Analyze and compare mathematical strategies for efficient problem solving; select and use one or more strategies to solve a problem.
			M07-S5C2-04	Represent a problem situation using multiple representations, describe the process used to solve the problem, and verify the reasonableness of the solution.
			M07-S5C2-05	Apply a previously used problem-solving strategy in a new context.
			M07-S5C2-06	Communicate the answer(s) to the question(s) in a problem using appropriate representations, including symbols and informal and formal mathematical language.
			M07-S5C2-07	Isolate and organize mathematical information taken from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning.
	7.MP.5	Use appropriate tools strategically.	M07-S5C2-02	Analyze and compare mathematical strategies for efficient problem solving; select and use one or more strategies to solve a problem.
			M07-S5C2-08	Make and test conjectures based on information collected from explorations and experiments.

**MATHEMATICS CROSSWALK**  
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**GRADE 7**

<b>Standards for Mathematical Practice – (MP)</b>				
<b>CLUSTER</b>	<b>2010 STANDARD</b>	<b>ITEM DESCRIPTION</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>
	7.MP.6	Attend to precision.	M07-S5C2-06	Communicate the answer(s) to the question(s) in a problem using appropriate representations, including symbols and informal and formal mathematical language.
	7.MP.7	Look for and make use of structure.	M07-S5C2-07	Isolate and organize mathematical information taken from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning.
			M07-S5C2-08	Make and test conjectures based on information collected from explorations and experiments.
	7.MP.8	Look for and express regularity in repeated reasoning.	M07-S5C2-04	Represent a problem situation using multiple representations, describe the process used to solve the problem, and verify the reasonableness of the solution.

**MATHEMATICS CROSSWALK**  
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**GRADE 7**

<b>Removed or Moved 2008 Performance Objectives</b>				
<b>CLUSTER</b>	<b>2010 STANDARD</b>	<b>ITEM DESCRIPTION</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>
	6.NS.4	MOVED TO GRADE 6	M07-S1C1-02	Find or use factors, multiples, or prime factorization within a set of numbers.
	6.NS.7	MOVED TO GRADE 6	M07-S1C1-03	Compare and order rational numbers using various models and representations.
	8.EE.3	MOVED TO GRADE 8	M07-S1C2-04	Represent and interpret numbers using scientific notation (positive exponents only).
	8.NS.2	MOVED TO GRADE 8	M07-S1C3-01	Estimate and apply benchmarks for rational numbers and common irrational numbers.
	8.NS.2	MOVED TO GRADE 8	M07-S1C3-03	Estimate square roots of numbers less than 1000 by locating them between two consecutive whole numbers.
		REMOVED	M07-S1C3-04	Estimate the measure of an object in one system of units given the measure of that object in another system and the approximate conversion factor.
	8.SP.1	MOVED TO GRADE 8	M07-S2C1-01	Solve problems by selecting, constructing, and interpreting displays of data including multi-line graphs and scatterplots.
	8.SP.1	MOVED TO GRADE 8	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.
	8.SP.1	MOVED TO GRADE 8	M07-S2C1-03	Identify outliers and determine their effect on mean, median, mode, and range.
		REMOVED	M07-S2C3-02	Solve counting problems using Venn diagrams and represent the answer algebraically.
		REMOVED	M07-S2C4-01	Use vertex-edge graphs and algorithmic thinking to represent and find solutions to practical problems related to Euler/Hamilton paths and circuits.
	6.EE.1 6.EE.2 6.EE.4	MOVED TO GRADE 6	M07-S3C3-02	Evaluate an expression containing one or two variables by substituting numbers for the variables.

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**MATHEMATICS CROSSWALK**  
**2010 MATHEMATICS STANDARD TO 2008 MATHEMATICS STANDARD**  
**GRADE 7**

<b>Removed or Moved 2008 Performance Objectives</b>				
<b>CLUSTER</b>	<b>2010 STANDARD</b>	<b>ITEM DESCRIPTION</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>
	6.EE.9	MOVED TO GRADE 6	M07-S3C3-04	Translate between graphs and tables that represent a linear equation.
	HS.G-C.2	MOVED TO HIGH SCHOOL	M07-S4C1-01	Recognize the relationship between central angles and intercepted arcs; identify arcs and chords of a circle.
	HS.G-CO.10	MOVED TO HIGH SCHOOL	M07-S4C1-04	Describe the relationship between the number of sides in a regular polygon and the sum of its interior angles.
	8.G.2	MOVED TO GRADE 8	M07-S4C1-05	Identify corresponding parts of congruent figures.
	8.G.1 8.G.2 8.G.3 8.G.4	MOVED TO GRADE 8	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.
	6.G.1	MOVED TO GRADE 6	M07-S4C4-02	Identify polygons having the same perimeter or area.
	6.G.1	MOVED TO GRADE 6	M07-S5C1-01	Create an algorithm to determine the area of a given composite figure.
		REMOVED	M07-S5C2-09	Solve logic problems using multiple variables and multiple conditional statements using words, pictures, and charts.
		REMOVED	M07-S5C2-10	Demonstrate and explain that the process of solving equations is a deductive proof.