I CAN Learn®
EDUCATION SYSTEMS

MINNESOTA

Correlation to High School Mathematics Standards

	Minnesota Mathematics Standards	I CAN Learn® Lesson #	I CAN Learn® Lesson Title
	ALGEBRA		
9.2.1.1	Understand the definition of a function. Use functional notation and evaluate a function at a given point in its domain.	HA1-436	Identifying Relations
		HA1-437	Identifying Relations as Functions
		HA1-438	Finding the Domain and Range of Functions
		HA1-439	Using Function Notation
9.2.1.2	Distinguish between functions and other relations defined symbolically, graphically or in tabular form.	HA1-437	Identifying Relations as Functions
9.2.1.3	Find the domain of a function defined symbolically, graphically or in a real-world context.	HA1-438	Finding the Domain and Range of Functions
		HA1-402	Translating Among Multiple Representations of Functions
9.2.1.4	Obtain information and draw conclusions from graphs of functions and other relations.	HA1-441	Applications of Functions and Relations Involving Distance, Rate, and Time
		HA1-442	Interpreting Graphs of Functions in Real-Life Situations
		HA1-955	Analyzing Linear Functions
		HA1-960	Real-World Applications of Linear Functions
		HA1-887	Applications of Absolute Value, Step, and Constant Functions
		HA1-935	Analyzing Graphs of Quadratic Functions
		HA1-940	Applications of Quadratic Equations
		HA1-945	Real-World Applications of Quadratic Functions
9.2.1.5	Identify the vertex, line of symmetry and intercepts of the parabola corresponding to a quadratic function, using symbolic and graphical methods, when the function is expressed in the form $f(x) = ax^2 + bx + c$, in the form $f(x) = a(x - h)^2 + k$, or in factored form.	HA1-935	Analyzing Graphs of Quadratic Functions
		HA1-930	Graphing Quadratic Functions with Horizontal and Vertical Shifting
		HA1-931	Graphing Quadratic Functions with Dilations, Reflections, and Transformations
		HA1-927	Graphing $f(x) = ax^2$ Using Dilations
		HA1-928	Graphing $f(x) = ax^2$ Using Dilations and Reflections
		HA1-929	Graphing $f(x) = ax^2 + c$ Using Dilations, Reflections, and Vertical Translations
9.2.1.6	Identify intercepts, zeros, maxima, minima and intervals of increase and decrease from the graph of a function.	HA1-442	Interpreting Graphs of Functions in Real-Life Situations
		HA1-935	Analyzing Graphs of Quadratic Functions
9.2.1.7	Understand the concept of an asymptote and identify asymptotes for exponential functions and reciprocals of linear functions, using symbolic and graphical methods.	HA1-820	Graphing Exponential Functions
9.2.1.8	Make qualitative statements about the rate of change of a function, based on its graph or table of values.	HA1-820	Graphing Exponential Functions
9.2.1.9	Determine how translations affect the symbolic and graphical forms of a function. Know how to use graphing technology to examine translations.	HA1-927	Graphing $f(x) = ax^2$ Using Dilations

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		HA1-928	Graphing f(x) = ax² Using Dilations and Reflections
		HA1-929	Graphing f(x) = ax² + c Using Dilations, Reflections, and Vertical Translations
		HA1-536	Solving Quadratic Equations Using the Graphing Calculator
		HA1-950	Graphing Absolute Value Functions
9.2.2.1	Represent and solve problems in various contexts using linear and quadratic functions.	HA1-441	Applications of Functions and Relations Involving Distance, Rate, and Time
		HA1-442	Interpreting Graphs of Functions in Real-Life Situations
		HA1-960	Real-World Applications of Linear Functions
		HA1-887	Applications of Absolute Value, Step, and Constant Functions
		HA1-950	Graphing Absolute Value Functions
9.2.2.2	Represent and solve problems in various contexts using exponential functions, such as investment growth, depreciation and population growth.	HA1-820	Graphing Exponential Functions
		HA1-825	Solving Exponential Growth and Decay Problems
9.2.2.3	Sketch graphs of linear, quadratic and exponential functions, and translate between graphs, tables and symbolic representations. Know how to use graphing technology to graph these functions.	HA1-380	Graphing Linear Equations
		HA1-398	Graphing Linear Equations Using Slope and y-Intercept or Slope and a Point
		HA1-401	How Variations of "m" and "b" Affect the Graph of y = mx + b
		HA1-415	Graphing Linear Inequalities with Two Variables
		HA1-955	Analyzing Linear Functions
		HA1-960	Real-World Applications of Linear Functions
		HA1-887	Applications of Absolute Value, Step, and Constant Functions
		HA1-416	Graphing Linear Inequalities with Two Variables Using the Graphing Calculator
		HA1-927	Graphing f(x) = ax² Using Dilations
		HA1-928	Graphing f(x) = ax² Using Dilations and Reflections
		HA1-929	Graphing f(x) = ax² + c Using Dilations, Reflections, and Vertical Translations
		HA1-455	Solving Systems of Linear Equations by Graphing
		HA1-806	Solving Systems of Linear Equations Using the Graphing Calculator
		HA1-475	Graphing the Solution Set of a System of Linear Inequalities
		HA1-950	Graphing Absolute Value Functions
		HA1-820	Graphing Exponential Functions
		HA1-402	Translating Among Multiple Representations of Functions
		HA1-892	Data Analysis Using the Graphing Calculator
		HA1-441	Applications of Functions and Relations Involving Distance, Rate, and Time
		HA1-442	Interpreting Graphs of Functions in Real-Life Situations
9.2.2.4	Express the terms in a geometric sequence recursively and by giving an explicit (closed form) formula, and express the partial sums of a geometric series recursively.	HA1-447	Identifying Number Patterns
		HA1-448	Finding the nth Term of a Pattern
9.2.2.5	Recognize and solve problems that can be modeled using finite geometric sequences and series, such as home mortgage and other compound interest examples. Know how to use spreadsheets and calculators to explore geometric sequences and series in various contexts.	HA1-447	Identifying Number Patterns
		MPA-128	Solving Real-World Problems Involving Simple and Compound Interest
		HA1-825	Solving Exponential Growth and Decay Problems
9.2.2.6	Sketch the graphs of common non-linear functions such as f(x) = √x, f(x) = abs value(x), f(x) = 1/x, f (x) = x³, and translations of these functions, such as f(x) = ab value(x - 2) + 4. Know how to use graphing technology to graph these functions.	HA1-950	Graphing Absolute Value Functions
		MPA-150	Identifying and Graphing Linear and Nonlinear Functions

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9.2.3.1	Evaluate polynomial and rational expressions and expressions containing radicals and absolute values at specified points in their domains.	HA1-005	Evaluating Algebraic Expressions
		HA1-065	Evaluating Expressions Containing Exponents
		HA1-490	Simplifying Square Roots
		HA1-492	Simplifying Square and Cube Roots
9.2.3.2	Add, subtract and multiply polynomials; divide a polynomial by a polynomial of equal or lower degree.	HA1-220	Identifying and Multiplying Monomials
		HA1-225	Dividing Monomials and Simplifying Expressions Having an Exponent of Zero
		HA1-230	Raising a Monomial or Quotient of Monomials to a Power
		HA1-240	Identifying the Degree of Polynomials and Simplifying by Combining Like Terms
		HA1-245	Adding and Subtracting Polynomials
		HA1-920	Simplifying Algebraic Expressions Using the Distributive Property
		HA1-255	Multiplying Two Binomials Using the FOIL Method
		HA1-260	Squaring a Binomial and Finding the Product of a Sum and Difference
		HA1-355	Dividing Polynomials
		HA1-862	Dividing Polynomials Using Factoring
		HA1-863	Dividing Polynomials Using Long Division
		HA1-864	Dividing Polynomials Using Synthetic Division
9.2.3.3	Factor common monomial factors from polynomials, factor quadratic polynomials, and factor the difference of two squares.	HA1-270	Factoring the Greatest Common Monomial Factor from a Polynomial
		HA1-271	Factoring Trinomials and the Differences of Squares Using Algebra Tiles
		HA1-275	Factoring the Difference Between Two Squares and Perfect Trinomial Squares
		HA1-276	Factoring Sums and Differences of Cubes
		HA1-280	Factoring $x^2 + bx + c$ When c is Greater Than Zero
		HA1-285	Factoring $x^2 + bx + c$ When c is Less Than Zero
		HA1-290	Factoring $ax^2 + bx + c$
		HA1-291	Factoring Quadratic Equations Using the Graphing Calculator
		HA1-295	Factoring by Removing a Common Factor and Grouping
		HA1-300	Factoring a Polynomial Completely
		HA1-305	Solving Polynomial Equations by Factoring
		HA1-310	The Practical Use of Polynomial Equations
9.2.3.4	Add, subtract, multiply, divide and simplify algebraic fractions.	HA1-315	Defining Rational Expressions and Determining the Restricted Values
		HA1-320	Simplifying Rational Expressions
		HA1-325	Multiplying Rational Expressions
		HA1-330	Dividing Rational Expressions
		HA1-335	Finding the LCD of Rational Expressions and Changing Fractions to Equivalent Fractions
		HA1-340	Adding and Subtracting Rational Expressions
		HA1-345	Adding and Subtracting Polynomials and Rational Expressions
		HA1-350	Simplifying Complex Fractions
		HA1-365	Solving Rational Equations
9.2.3.5	Check whether a given complex number is a solution of a quadratic equation by substituting it for the variable and evaluating the expression, using arithmetic with complex numbers.	HA1-905	Quadratic Equations with Irrational Roots
		HA1-910	Complex Numbers
		HA1-915	Algebraic Operations with Complex Numbers
		HA1-925	Using the Discriminant to Analyze the Solution of a Quadratic Equation
9.2.3.6	Apply the properties of positive and negative rational exponents to generate equivalent algebraic expressions, including those involving n^{th} roots.	HA1-810	Simplifying Expressions Using the Multiplication Properties of Exponents
		HA1-815	Simplifying Expressions with Negative and Zero Exponents
		HA1-818	Simplifying Expressions Using the Division Properties of Exponents
		HA1-492	Simplifying Square and Cube Roots

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9.2.3.7	Justify steps in generating equivalent expressions by identifying the properties used. Use substitution to check the equality of expressions for some particular values of the variables; recognize that checking with substitution does not guarantee equality of expressions for all values of the variables.	HA1-085	Simplifying Expressions Using the Properties of Real Numbers
		HA1-079	Using a Concrete Model to Simplify Algebraic Expressions
		HA1-090	Simplifying Expressions Using the Property of -1
		HA1-080	Simplifying and Evaluating Algebraic Expressions Containing Grouping Symbols
		HA1-210	Solving Equations Involving Absolute Value
		HA1-215	Solving Absolute Value Inequalities
		HA1-305	Solving Polynomial Equations by Factoring
		HA1-365	Solving Rational Equations
		HA1-510	Solving Radical Equations
		HA1-805	Applying Algebra Concepts
9.2.4.1	Represent relationships in various contexts using quadratic equations and inequalities. Solve quadratic equations and inequalities by appropriate methods including factoring, completing the square, graphing and the quadratic formula. Find non-real complex roots when they exist. Recognize that a particular solution may not be applicable in the original context. Know how to use calculators, graphing utilities or other technology to solve quadratic equations and inequalities.	Content under review	This standard is partially met. For examples, please see the following:
		HA1-935	Analyzing Graphs of Quadratic Functions
		HA1-940	Applications of Quadratic Equations
		HA1-945	Real-World Applications of Quadratic Functions
		HA1-305	Solving Polynomial Equations by Factoring
		HA1-310	The Practical Use of Polynomial Equations
		HA1-525	Solving Quadratic Equations Involving Perfect Square Expressions
		HA1-530	Solving Quadratic Equations by Completing the Square
		HA1-535	Developing the Quadratic Formula and Using it to Solve Equations
		HA1-536	Solving Quadratic Equations Using the Graphing Calculator
		HA1-805	Applying Algebra Concepts
		HA1-905	Quadratic Equations with Irrational Roots
		HA1-925	Using the Discriminant to Analyze the Solution of a Quadratic Equation
9.2.4.2	Represent relationships in various contexts using equations involving exponential functions; solve these equations graphically or numerically. Know how to use calculators, graphing utilities or other technology to solve these equations.	HA1-820	Graphing Exponential Functions
		HA1-855	Solving Exponential Equations
9.2.4.3	Recognize that to solve certain equations, number systems need to be extended from whole numbers to integers, from integers to rational numbers, from rational numbers to real numbers, and from real numbers to complex numbers. In particular, non-real complex numbers are needed to solve some quadratic equations with real coefficients.	HA1-020	Classifying Numbers into Subsets of Real Numbers
		HA1-925	Using the Discriminant to Analyze the Solution of a Quadratic Equation
		HA1-905	Quadratic Equations with Irrational Roots
		HA1-910	Complex Numbers
9.2.4.4	Represent relationships in various contexts using systems of linear inequalities; solve them graphically. Indicate which parts of the boundary are included in and excluded from the solution set using solid and dotted lines.	HA1-475	Graphing the Solution Set of a System of Linear Inequalities
9.2.4.5	Solve linear programming problems in two variables using graphical methods.	HA1-870	Solving Problems with Systems of Linear Equations and Inequalities
9.2.4.6	Represent relationships in various contexts using absolute value inequalities	HA1-215	Solving Absolute Value Inequalities

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	in two variables; solve them graphically.		
9.2.4.7	Solve equations that contain radical expressions. Recognize that extraneous solutions may arise when using symbolic methods.	HA1-510	Solving Radical Equations
9.2.4.8	Assess the reasonableness of a solution in its given context and compare the solution to appropriate graphical or numerical estimates; interpret a solution in the original context.	Throughout	This standard is demonstrated throughout. For examples, please see the following:
		HA1-150	Writing an Equation to Solve Word Problems
		HA1-155	Writing an Equation to Solve Consecutive Integer Problems
		HA1-160	Writing an Equation to Solve Distance, Rate, and Time Problems
		HA1-362	Solving Work Problems
		HA1-165	Using Equations to Solve Percent Problems
		HA1-170	Solving Percent of Change Problems
		HA1-310	The Practical Use of Polynomial Equations
		HA1-210	Solving Equations Involving Absolute Value
		HA1-215	Solving Absolute Value Inequalities
		HA1-305	Solving Polynomial Equations by Factoring
		HA1-365	Solving Rational Equations
		HA1-510	Solving Radical Equations
		HA1-805	Applying Algebra Concepts
	GEOMETRY & MEASUREMENT		
9.3.1.1	Determine the surface area and volume of pyramids, cones and spheres. Use measuring devices or formulas as appropriate.	HA1-891	Using Models to Derive Formulas for Three-Dimensional Solids
9.3.1.2	Compose and decompose two- and three-dimensional figures; use decomposition to determine the perimeter, area, surface area and volume of various figures.	HA1-890	Using Models to Derive Formulas for Two-Dimensional Geometric Figures
		HA1-891	Using Models to Derive Formulas for Three-Dimensional Solids
9.3.1.3	Understand that quantities associated with physical measurements must be assigned units; apply such units correctly in expressions, equations and problem solutions that involve measurements; and convert between measurement systems.	HA1-135	Evaluating Formulas
		HA1-362	Solving Work Problems
		MPA-062	Converting Units in Customary System
		MPA-061	Converting Metric Units of Length, Capacity, and Mass
		MPA-063	Converting Units Between Metric and Customary System
9.3.1.4	Understand and apply the fact that the effect of a scale factor k on length, area and volume is to multiply each by k, k^2 and k^3, respectively.	MPA-111	Comparing Perimeters, Areas, and Volumes of Similar Geometric Figures and Solids
9.3.1.5	Make reasonable estimates and judgments about the accuracy of values resulting from calculations involving measurements.	MPA-134	Calculating with Precision, Accuracy, and Significant Digits
9.3.2.1	Understand the roles of axioms, definitions, undefined terms and theorems in logical arguments.	HGM-005	Applying Postulates and Undefined Terms
9.3.2.2	Accurately interpret and use words and phrases such as "if…then," "if and only if," "all," and "not." Recognize the logical relationships between an "if…then" statement and its inverse, converse and contrapositive.	HA1-449	Applying Inductive and Deductive Reasoning
		HGM-030	Deductive Reasoning: Writing Conditional Statements
		HGM-035	Using Deductive Reasoning: Algebraic Proof
9.3.2.3	Assess the validity of a logical argument and give counterexamples to disprove a statement.	HA1-449	Applying Inductive and Deductive Reasoning
		HGM-027	Identifying Counterexamples and Using Proof by Contradiction
9.3.2.4	Construct logical arguments and write proofs of theorems and other results in geometry, including proofs by contradiction. Express proofs in a form that clearly justifies the reasoning, such as two-column proofs, paragraph proofs, flow charts or illustrations.	HGM-035	Using Deductive Reasoning: Algebraic Proof
		HGM-065	Proving Lines Parallel

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9.3.2.5	Use technology tools to examine theorems, make and test conjectures, perform constructions and develop mathematical reasoning skills in multi-step problems. The tools may include compass and straight edge, dynamic geometry software, design software or Internet applets.	Content under review	
9.3.3.1	Know and apply properties of parallel and perpendicular lines, including properties of angles formed by a transversal, to solve problems and logically justify results.	HGM-060	Examining Angle Relationships and Parallel Lines
		HGM-065	Proving Lines Parallel
		HGM-070	Identifying Relationships: Parallel Lines and Segments
		HGM-075	Examining Perpendicular Lines
9.3.3.2	Know and apply properties of angles, including corresponding, exterior, interior, vertical, complementary and supplementary angles, to solve problems and logically justify results.	HGM-015	Measuring and Drawing Rays and Angles
		HGM-045	Applying Properties of Complementary and Supplementary Angles
		HGM-050	Using the Angle Addition Postulate and Properties of Angle Bisectors
		HGM-055	Investigating Vertical Angles and Linear Pairs
		HGM-060	Examining Angle Relationships and Parallel Lines
9.3.3.3	Know and apply properties of equilateral, isosceles and scalene triangles to solve problems and logically justify results.	HGM-145	Classifying Triangles and Applying Angle Relationships
9.3.3.4	Apply the Pythagorean Theorem and its converse to solve problems and logically justify results.	HA1-515	Using the Pythagorean Theorem
		HA1-516	Applications of the Pythagorean Theorem
9.3.3.5	Know and apply properties of right triangles, including properties of 45-45-90 and 30-60-90 triangles, to solve problems and logically justify results.	HGM-215	Investigating Properties of the 30°-60°-90° Triangle
		HGM-220	Investigating Properties of the 45°-45°-90° Triangle
9.3.3.6	Know and apply properties of congruent and similar figures to solve problems and logically justify results.	MPA-121	Identifying Similar and Congruent Polygons Using Proportions
9.3.3.7	Use properties of polygons—including quadrilaterals and regular polygons—to define them, classify them, solve problems and logically justify results.	MPA-058	Identifying Polygons
		MPA-059	Classifying Triangles and Quadrilaterals
		HA1-890	Using Models to Derive Formulas for Two-Dimensional Geometric Figures
9.3.3.8	Know and apply properties of a circle to solve problems and logically justify results.	MPA-070	Finding the Circumference of a Circle
		MPA-071	Finding the Area of a Circle
		HA1-890	Using Models to Derive Formulas for Two-Dimensional Geometric Figures
9.3.4.1	Understand how the properties of similar right triangles allow the trigonometric ratios to be defined, and determine the sine, cosine and tangent of an acute angle in a right triangle.	Content under review	
9.3.4.2	Apply the trigonometric ratios sine, cosine and tangent to solve problems, such as determining lengths and areas in right triangles and in figures that can be decomposed into right triangles. Know how to use calculators, tables or other technology to evaluate trigonometric ratios.	Content under review	
9.3.4.3	Use calculators, tables or other technologies in connection with the trigonometric ratios to find angle measures in right triangles in various contexts.	Content under review	
9.3.4.4	Use coordinate geometry to represent and analyze line segments and polygons, including determining lengths, midpoints and slopes of line segments.	HGM-010	Measuring and Drawing Segments
		HGM-080	Finding the Midpoint of a Segment
		HGM-085	Finding the Distance Between Two Points
		HGM-090	Examining Slopes of Parallel and Perpendicular Lines

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9.3.4.5	Know the equation for the graph of a circle with radius r and center (h, k), $(x – h)^2 + (y – k)^2 = r^2$, and justify this equation using the Pythagorean Theorem and properties of translations.	Content under review	
9.3.4.6	Use numeric, graphic and symbolic representations of transformations in two dimensions, such as reflections, translations, scale changes and rotations about the origin by multiples of 90˚, to solve problems involving figures on a coordinate grid.	MPA-180	Examining Line and Rotational Symmetry
		MPA-108	Graphing Translations and Reflections on the Coordinate Plane
		MPA-120	Applying Dilations in the Coordinate Plane
9.3.4.7	Use algebra to solve geometric problems unrelated to coordinate geometry, such as solving for an unknown length in a figure involving similar triangles, or using the Pythagorean Theorem to obtain a quadratic equation for a length in a geometric figure.	HA1-515	Using the Pythagorean Theorem
		HA1-516	Applications of the Pythagorean Theorem
		HA1-520	Finding the Distance Between Two Points on a Coordinate Plane
		HA1-940	Applications of Quadratic Equations
		HA1-890	Using Models to Derive Formulas for Two-Dimensional Geometric Figures
		HA1-891	Using Models to Derive Formulas for Three-Dimensional Solids
	DATA ANALYSIS & PROBABILITY		
9.4.1.1	Describe a data set using data displays, including box-and-whisker plots; describe and compare data sets using summary statistics, including measures of center, location and spread. Measures of center and location include mean, median, quartile and percentile. Measures of spread include standard deviation, range and inter-quartile range. Know how to use calculators, spreadsheets or other technology to display data and calculate summary statistics.	HA1-540	Finding the Mean, Median, and Mode from Data and Frequency Distribution Tables
		HA1-541	Analyzing Data Using the Measures of Central Tendency and the Range
		HA1-885	Histograms and the Normal Distribution
		HA1-555	Computing the Range, Variance, and Standard Deviation of a Set of Data
9.4.1.2	Analyze the effects on summary statistics of changes in data sets.	HA1-555	Computing the Range, Variance, and Standard Deviation of a Set of Data
		HA1-885	Histograms and the Normal Distribution
9.4.1.3	Use scatterplots to analyze patterns and describe relationships between two variables. Using technology, determine regression lines (line of best fit) and correlation coefficients; use regression lines to make predictions and correlation coefficients to assess the reliability of those predictions.	HA1-965	Determining the Best-Fitting Line
		HA1-877	Drawing Inferences and Making Predictions from Tables and Graphs
9.4.1.4	Use the mean and standard deviation of a data set to fit it to a normal distribution (bell-shaped curve) and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets and tables to estimate areas under the normal curve.	HA1-885	Histograms and the Normal Distribution
9.4.2.1	Evaluate reports based on data published in the media by identifying the source of the data, the design of the study, and the way the data are analyzed and displayed. Show how graphs and data can be distorted to support different points of view. Know how to use spreadsheet tables and graphs or graphing technology to recognize and analyze distortions in data displays.	MPA-840	Interpreting Data
9.4.2.2	Identify and explain misleading uses of data; recognize when arguments based on data confuse correlation and causation.	MPA-099	Recognizing Misleading Statistics and Graphs
9.4.2.3	Design simple experiments and explain the impact of sampling methods, bias and the phrasing of questions asked during data collection.	HA1-542	Sampling and Bias (Lesson in development)
9.4.3.1	Select and apply counting procedures, such as the multiplication and addition principles and tree diagrams, to determine the size of a sample	HA1-565	Solving Problems Involving Independent, Dependent, and Mutually Exclusive and Inclusive Events

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	space (the number of possible outcomes) and to calculate probabilities.		
		HA1-879	Applying Counting Techniques to Permutations and Combinations
9.4.3.2	Calculate experimental probabilities by performing simulations or experiments involving a probability model and using relative frequencies of outcomes.	HA1-560	Determining Probability of an Event and Complementary Event from a Random Experiment
9.4.3.3	Understand that the Law of Large Numbers expresses a relationship between the probabilities in a probability model and the experimental probabilities found by performing simulations or experiments involving the model.	HA1-885	Histograms and the Normal Distribution
9.4.3.4	Use random numbers generated by a calculator or a spreadsheet, or taken from a table, to perform probability simulations and to introduce fairness into decision making.	Content under review	
9.4.3.5	Apply probability concepts such as intersections, unions and complements of events, and conditional probability and independence, to calculate probabilities and solve problems.	HA1-565	Solving Problems Involving Independent, Dependent, and Mutually Exclusive and Inclusive Events
9.4.3.6	Describe the concepts of intersections, unions and complements using Venn diagrams. Understand the relationships between these concepts and the words AND, OR, NOT, as used in computerized searches and spreadsheets.	HA1-886	Unions and Intersections of Sets Using Venn Diagrams
9.4.3.7	Understand and use simple probability formulas involving intersections, unions and complements of events.	HA1-560	Determining Probability of an Event and Complementary Event from a Random Experiment
9.4.3.8	Apply probability concepts to real-world situations to make informed decisions.	HA1-560	Determining Probability of an Event and Complementary Event from a Random Experiment
9.4.3.9	Use the relationship between conditional probabilities and relative frequencies in contingency tables.	Content under review	

MM1-Fundamentals of Mathematics
MPA- Pre-Algebra
HA1-Algebra 1
Note: Standards were taken from the Minnesota Mathematics Standards for Grades 9, 10, 11 document adopted by the Minnesota State Board of Education revised in 2007 and put into rule effective September 22, 2008.