

The Correlation of

PLATO®

Curricula to

Idaho Content Standards

(ICS)

Mathematics

Grades 9-10

July 24, 2006

INTRODUCTION

PLATO Learning Inc. combines PLATO® computer-assisted instruction into a flexible integrated learning system to enhance instructional effectiveness in education programs. This document identifies PLATO instructional activities that correlate to the Idaho Content Standards, Mathematics, 2006 .URL: <http://www.idahoachieves.com/>

It is recommended that instructors review the correlation in order to fine-tune the activity to fit their educational environment. Modules may be added or removed; Web sites and offline activities may also be incorporated to enhance the learning path.

The following PLATO courseware was used in this alignment:

Foundational Mathematics

Math Fundamentals

Math Problem Solving

Applied Math

Algebra 1, Part 1

Algebra 1, Part 2

Algebra 2, Part 1

Algebra 2, Part 2

Geometry and Measurement 1

Geometry and Measurement 2

Trigonometry

Calculus 1

Calculus 2

Data Skills

PLATO Learning, Inc. looks forward to supporting your initiatives in providing successful educational programs using PLATO© computer-based lessons.

Grade Level 9	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
	<p>Standard 1: Number and Operation</p>	<p>Standard 1: Number and Operation</p> <p>Students in Grade 9 deepen their understanding of real numbers by applying properties of rational numbers and exponents and by identifying exact and approximate roots without simplification. Students use positive and negative numbers, absolute value, fractions, decimals, percentages, and scientific notation. Students use the proper order of operations and perform operations with rational numbers. Students apply number sense to everyday situations and judge reasonableness of answers.</p>	<p>Standard 1: Number and Operation</p> <p>Goal 1.1: Understand and use numbers.</p> <p>9.M.1.1.1 Apply properties of rational numbers.</p> <p>9.M.1.1.2 Use positive and negative numbers, absolute value, fractions, decimals, percentages, and scientific notation, including application in real world situations.</p>	<p>Standard 1: Number and Operation</p> <p>Goal 1.1: Understand and use numbers.</p> <p>9.M.1.1.1 Apply properties of rational numbers. PLATO Intermediate Algebra Rational Expression (Int. Alg) Rational Sum & Difference (Int. Alg)</p> <p>9.M.1.1.2 Use positive and negative numbers, absolute value, fractions, decimals, percentages, and scientific notation, including application in real world situations. PLATO® Algebra 1, Part 1 Basic Number Ideas (Alg 1.1) The Additive Inverse of Integers (Alg 1.1) PLATO® Algebra 1, Part 2 Sets and Numbers (Alg 1.2) Additive Inverse of an Integer (Alg 1.2) Equations and Inequalities (Alg 1.2) Absolute Value of a Number (Alg 1.2) Equations with Absolute Values (Alg 1.2) Review: Equations and Inequalities (Alg 1.2) PLATO® Algebra 2, Part 2 Numbers and their Properties (Alg 2.2) Scientific Notation (Alg 2.2) Special Equations and Inequalities (Alg 2.2) Evaluating Expressions with Absolute Value (Alg 2.2) Absolute Value, Inequalities, and Interval Notation (Alg 2.2)</p>

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			<p>9.M.1.1.5 Solve problems using number theory concepts (factors, multiples, primes).</p> <p>9.M.1.1.6 Use appropriate vocabulary.</p> <p>Goal 1.2: Perform computations accurately.</p> <p>9.M.1.2.1 Use the order of operations and perform operations with rational numbers.</p> <p>Goal 1.3: Estimate and judge reasonableness of results.</p>	<p>9.M.1.1.5 Solve problems using number theory concepts (factors, multiples, primes). PLATO® Algebra 1, Part 1 Basic Number Ideas (Alg 1.1) Prime and Composite Numbers (Alg 1.1) Multiplying Common Fractions (Alg 1.1) Adding and Subtracting Fractions (Alg 1.1) PLATO® Algebra 1, Part 2 Sets and Numbers (Alg 1.2) Review: Fractions and Sets (Alg 1.2)</p> <p>9.M.1.1.6 Use appropriate vocabulary. Algebra 1 Investigations Projects for the Real World Level I</p> <p>Goal 1.2: Perform computations accurately.</p> <p>9.M.1.2.1 Use the order of operations and perform operations with rational numbers. PLATO® Algebra 1, Part 1 Math Sentences (Alg 1.1) Order of Operations (Alg 1.1) Expressions in 2 or More Variables (Alg 1.1)</p> <p>Goal 1.3: Estimate and judge reasonableness of results. PLATO Algebra 1, Part 1 Estimation Basics (Alg 1.1) Estimation by Clustering (Alg 1.1)</p>

Grade Level 9	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
	Standard 2: Concepts	Standard 2:	<p>9.M.1.3.1 Apply number sense to everyday situations and judge reasonableness of results.</p> <p>9.M.1.3.2 Identify that error accumulates in a computation when there is rounding.</p> <p>Standard 2: Concepts and Principles</p>	<p>9.M.1.3.1 Apply number sense to everyday situations and judge reasonableness of results.</p> <p>Math Fundamentals Problem Solving Algebra 1, Part 1 Algebra 1, Part 2 Algebra 2, Part 1 Algebra 2, Part 2 Investigations and Practice</p> <p>9.M.1.3.2 Identify that error accumulates in a computation when there is rounding.</p> <p>PLATO® Applied Mathematics Applied Math Estimating PLATO® Algebra 1, Part 1 Basic Number Ideas (Alg 1.1) Mental Math with Whole Numbers and Decimals (Alg 1.1) Special Topics (Alg 1.1) Estimation Basics (Alg 1.1)</p> <p>Standard 2: Concepts and Principles of Measurement</p>

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	<p>and Principles of Measurement</p>	<p>Concepts and Principles of Measurement</p> <p>Students in Grade 9 formulate and use proportions, ratios, and scaling. Students apply concepts of rates and direct and indirect measurements. Students evaluate given measurement formulas for two- and three-dimensional objects.</p>	<p>of Measurement</p> <p>Goal 2.1: Understand and use U.S. customary and metric measurements.</p> <p>9.M.2.1.1 Given the formulas, find the circumference, perimeter, or area of triangles, circles, and quadrilaterals, and the volume and surface area of rectangular prisms and cylinders.</p> <p>9.M.2.1.2 Solve problems involving</p>	<p>Goal 2.1: Understand and use U.S. customary and metric measurements.</p> <p>9.M.2.1.1 Given the formulas, find the circumference, perimeter, or area of triangles, circles, and quadrilaterals, and the volume and surface area of rectangular prisms and cylinders.</p> <p>PLATO® Math Problem Solving Geometry and Measurement Math Problem Solving: Planning a Park Math Problem Solving: Shelf Space PLATO® Geometry and Measurement 1 Geometry Circles/Arcs/Circumferences Using Geometry Measurement Area, Part 1 Area, Part 2 Volume Using Measurement PLATO® Geometry and Measurement 2 Transformations, Symmetry, and Area Area of Right Triangles and Parallelograms Area of Any Triangle Area of Trapezoids and Rhombuses Circles Measuring Circumference The Area of Circles Solids and Coordinate Geometry Area and Volume of Cylinders</p> <p>9.M.2.1.2 Solve problems involving circumference,</p>

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			<p>and direct and indirect measurements.</p> <p>9.M.2.2.3 Construct equivalent units, comparable units, and conversions.</p> <p>Goal 2.3: Apply dimensional analysis.</p> <p>9.M.2.3.1 Use customary and metric</p>	<p>measurements. PLATO® Math Problem Solving Beginning Algebra Math Problem Solving: Tunnel through Bald Mountain Intermediate Algebra Math Problem Solving: Running a Race Geometry and Measurement Math Problem Solving: Shelf Space</p> <p>9.M.2.2.3 Construct equivalent units, comparable units, and conversions. PLATO® Math Problem Solving Beginning Algebra Math Problem Solving: Tunnel through Bald Mountain PLATO® Applied Mathematics Applied Math Converting Linear Measurements Converting Weight Measurements Converting Volume Measurements PLATO® Geometry and Measurement 1 Measurement Metric Measurement</p> <p>Goal 2.3: Apply dimensional analysis.</p> <p>9.M.2.3.1 Use customary and metric units and their</p>

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			<p>units and their relationship to one another and to real world applications involving length, area, capacity, weight, time, and temperature.</p> <p>Goal 2.4: Apply appropriate techniques and tools to determine measurements.</p> <p>9.M.2.4.1 Determine and use appropriate units.</p> <p>9.M.2.4.2 Approximate error in measurement situations.</p>	<p>relationship to one another and to real world applications involving length, area, capacity, weight, time, and temperature.</p> <p>PLATO® Math Problem Solving Geometry and Measurement Math Problem Solving: Shelf Space PLATO® Applied Mathematics Applied Math Converting Weight Measurements PLATO® Geometry and Measurement 1 Measurement Metric Measurement</p> <p>Goal 2.4: Apply appropriate techniques and tools to determine measurements.</p> <p>9.M.2.4.1 Determine and use appropriate units. (349.01.a)</p> <p>PLATO® Math Problem Solving Geometry and Measurement Math Problem Solving: Planning a Park Math Problem Solving: Shelf Space PLATO® Applied Mathematics Applied Math Using Linear Measurement Tools</p> <p>9.M.2.4.2 Approximate error in measurement situations.</p> <p>PLATO® Applied Mathematics Applied Math Using Linear Measurement Tools</p>
		Standard 3:	Standard 3: Concepts and Language	Standard 3: Concepts and Language of Algebra and

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		<p>Concepts and Language of Algebra and Functions</p> <p>Students in Grade 9 use appropriate procedures for manipulating and simplifying algebraic expressions involving variables, integers, rational numbers, and for solving multi-step, firstdegree equations and inequalities. Students understand the concept and applications of functions and mathematical models. Given graphs, charts, ordered pairs, mappings, or equations, students determine whether a relation is a function. Students evaluate functions written in functional notation and, given a function, students identify domain and range.</p>	<p>of Algebra and Functions</p> <p>Goal 3.1: Use algebraic symbolism as a tool to represent mathematical relationships.</p> <p>9.M.3.1.1 Represent mathematical relationships using variables, expressions, linear equations and inequalities.</p>	<p>Functions</p> <p>Goal 3.1: Use algebraic symbolism as a tool to represent mathematical relationships.</p> <p>9.M.3.1.1 Represent mathematical relationships using variables, expressions, linear equations and inequalities. PLATO® Math Problem Solving Beginning Algebra Math Problem Solving: Plan for Fishing Trip Intermediate Algebra Math Problem Solving: Video Rental Math Problem Solving: Running a Race Advanced Algebra Math Problem Solving: Car Rental Math Problem Solving: Building Boats Math Problem Solving: Saving the Birds PLATO® Algebra 1, Part 1 Basic Number Ideas (Alg 1.1) Using Basic Number Ideas (Alg 1.1) Math Sentences (Alg 1.1) Expressions in 1 Variable (Alg 1.1) Expressions in 2 or More Variables (Alg 1.1) Using Linear Equations to Solve Problems (Alg 1.1) Equations and Formulas (Alg 1.1) Literal Equations (Alg 1.1) PLATO® Algebra 1, Part 2 Equations and Inequalities (Alg 1.2) Solving Problems with Linear Equations in 1 Variable (Alg 1.2)</p>

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			<p>procedures to solve multi-step, first-degree equations and inequalities; such as $3(2x - 5) = 5x + 7$ or $3(2x - 5) > 5x + 7$.</p> <p>9.M.3.3.2 Differentiate between linear and non-linear equations and graphs.</p> <p>Goal 3.4: Solve simple linear systems of equations.</p> <p>9.M.3.4.1 Use appropriate</p>	<p>first-degree equations and inequalities; such as $3(2x - 5) = 5x + 7$ or $3(2x - 5) > 5x + 7$. PLATO® Math Problem Solving Intermediate Algebra Math Problem Solving: Video Rental PLATO® Algebra 1, Part 2 Equations and Inequalities (Alg 1.2) More Difficult Linear Equations in 1 Variable (Alg 1.2) Linear Inequalities in 1 Variable, Part 3 (Alg 1.2) Review: Equations and Inequalities (Alg 1.2) PLATO® Algebra 2, Part 2 Special Equations and Inequalities (Alg 2.2) Graphing Linear Inequalities in 1 Variable (Alg 2.2)</p> <p>9.M.3.3.2 Differentiate between linear and non-linear equations and graphs. PLATO® Math Problem Solving Advanced Algebra Math Problem Solving: Building Boats PLATO® Algebra 1, Part 1 Introduction to Functions (Alg 1.1) Linear Patterns (Alg 1.1) PLATO® Algebra 2, Part 2 Functions and their Graphs (Alg 2.2) Solving Problems with Linear Functions (Alg 2.2)</p> <p>Goal 3.4: Solve simple linear systems of equations.</p> <p>9.M.3.4.1 Use appropriate procedures to solve linear systems</p>

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			<p>procedures to solve linear systems of equations involving two variables; such as $x + y = 7$ and $2x + 3y = 21$.</p> <p>Goal 3.5: Understand the concept of functions.</p> <p>9.M.3.5.1 Given graphs, charts,</p>	<p>of equations involving two variables; such as $x + y = 7$ and $2x + 3y = 21$.</p> <p>PLATO® Math Problem Solving Intermediate Algebra Math Problem Solving: Video Rental Math Problem Solving: Running a Race Advanced Algebra Math Problem Solving: Car Rental Math Problem Solving: Building Boats PLATO® Algebra 1, Part 1 Graphing Basics (Alg 1.1) Solving and Graphing Systems of Equations (Alg 1.1) Solving Problems with Systems of Linear Equations (Alg 1.1) PLATO® Algebra 2, Part 1 Linear Systems of Equations and Inequalities (Alg 2.1) Solving Linear Systems of Equations: Graphs (Alg 2.1) Solving Linear Systems of Equations: Substitution (Alg 2.1) Solving Linear Systems of Equations: Addition (Alg 2.1) Solving Problems with Linear Systems (Alg 2.1) Review: Linear Systems (Alg 2.1)</p> <p>Goal 3.5: Understand the concept of functions.</p> <p>9.M.3.5.1 Given graphs, charts, ordered pairs, mappings, or</p>

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			<p>ordered pairs, mappings, or equations, determine whether a relation is a function.</p> <p>9.M.3.5.2 Evaluate functions written in functional notation.</p> <p>9.M.3.5.3 Given a function, identify domain and range.</p> <p>Goal 3.6: Apply functions to a</p>	<p>equations, determine whether a relation is a function. PLATO® Algebra 1, Part 1 Introduction to Functions (Alg 1.1) Functions (Alg 1.1) Describing Functions with Equations, Tables, and Graphs (Alg 1.1) PLATO® Algebra 2, Part 2 Functions and their Graphs (Alg 2.2) Defining a Function with Its Rule (Alg 2.2) Functions and their Graphs (Alg 2.2) Finding Values of a Function Using Its Rule (Alg 2.2) Functions and their Graphs (Alg 2.2) Equations and Graphs of Functions, Part 1 (Alg 2.2)</p> <p>9.M.3.5.2 Evaluate functions written in functional notation. PLATO® Math Problem Solving Advanced Algebra Math Problem Solving: Building Boats PLATO® Algebra 2, Part 2 Functions and their Graphs (Alg 2.2) Finding Values of a Function Using Its Rule (Alg 2.2) Functions and their Graphs (Alg 2.2) Composite Functions (Alg 2.2)</p> <p>9.M.3.5.3 Given a function, identify domain and range. PLATO® Algebra 2, Part 2 Functions and their Graphs (Alg 2.2) Composite Functions (Alg 2.2) Domain Values of Composite Functions (Alg 2.2)</p> <p>Goal 3.6: Apply functions to a variety of problems.</p>

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			<p>variety of problems.</p> <p>9.M.3.6.1 Model and solve real-world phenomena using multi-step, first degree, single variable equations and inequalities, linear equations, and two-variable linear systems of equations.</p>	<p>9.M.3.6.1 Model and solve real-world phenomena using multi-step, first degree, single variable equations and inequalities, linear equations, and two-variable linear systems of equations.</p> <p>PLATO® Math Problem Solving Beginning Algebra Math Problem Solving: Plan for Fishing Trip Intermediate Algebra Math Problem Solving: Video Rental Math Problem Solving: Running a Race Advanced Algebra Math Problem Solving: Car Rental Math Problem Solving: Building Boats Math Problem Solving: Saving the Birds PLATO® Algebra 1, Part 1 Math Sentences (Alg 1.1) Using Linear Equations to Solve Problems (Alg 1.1) Graphing Basics (Alg 1.1) Solving Problems with Systems of Linear Equations (Alg 1.1) Equations and Formulas (Alg 1.1) Literal Equations (Alg 1.1) Introduction to Functions (Alg 1.1) Interpreting Graphs to Solve Problems (Alg 1.1) PLATO® Algebra 1, Part 2 Equations and Inequalities (Alg 1.2) More Difficult Linear Equations in 1 Variable (Alg 1.2) Solving Problems with Linear Equations in 1 Variable (Alg 1.2) Review: Equations and Inequalities (Alg 1.2) PLATO® Algebra 2, Part 1 Linear Systems of Equations and Inequalities (Alg 2.1) Solving Problems with Linear Systems (Alg 2.1) Review: Linear Systems (Alg 2.1) PLATO® Algebra 2, Part 2 Special Equations and Inequalities (Alg 2.2) Graphing Linear Inequalities in 1 Variable (Alg 2.2)</p>

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			<p>9.M.3.6.2 Use graphs and sequences to represent and solve problems.</p>	<p>Functions and their Graphs (Alg 2.2) Solving Problems with Linear Functions (Alg 2.2)</p> <p>9.M.3.6.2 Use graphs and sequences to represent and solve problems. PLATO® Math Problem Solving Intermediate Algebra Math Problem Solving: Video Rental Math Problem Solving: Running a Race Advanced Algebra Math Problem Solving: Car Rental Math Problem Solving: Building Boats PLATO® Algebra 1, Part 1 Graphing Basics (Alg 1.1) Solving and Graphing Systems of Equations (Alg 1.1) Introduction to Functions (Alg 1.1) Patterns and Sequences (Alg 1.1) PLATO® Algebra 2, Part 1 Linear Systems of Equations and Inequalities (Alg 2.1) Solving Linear Systems of Equations: Graphs (Alg 2.1) Solving Linear Systems of Inequalities: Graphs (Alg 2.1) Solving Problems with Linear Systems (Alg 2.1) Review: Linear Systems (Alg 2.1)</p>
	Standard 4: Concepts	Standard 4:	Standard 4: Concepts and Principles	Standard 4: Concepts and Principles of Geometry

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	<p>and Principles of Geometry</p>	<p>Concepts and Principles of Geometry</p> <p>Students in Grade 9 represent linear relationships using tables, graphs, and mathematical symbols. Students interpret attributes of linear relationships such as slope, rate of change, and intercepts.</p>	<p>of Geometry</p> <p>Goal 4.1: Apply concepts of size, shape, and spatial relationships.</p> <p>9.M.4.1.1 Recognize congruency and similarity of two-dimensional figures.</p> <p>9.M.4.1.2 Recognize similarity as it relates to size variations in two-dimensional objects.</p>	<p>Goal 4.1: Apply concepts of size, shape, and spatial relationships.</p> <p>9.M.4.1.1 Recognize congruency and similarity of two-dimensional figures. PLATO® Geometry and Measurement 2 Introduction to Geometry Congruent Angles Triangles and Lines Congruent Triangles, Part 1</p> <p>9.M.4.1.2 Recognize similarity as it relates to size variations in two-dimensional objects. Math Fundamentals ·Ratio/Proportion/Percent ·Proportion Concepts ·Ratio/Proportion/Percent Review ·Problem Solving 6 ·Geometry and Measurement ·Figure Comparison ·Basic Figures Review Math Problem Solving ·Math Fundamentals ·Math Problem Solving: Running a Business ·Beginning Algebra ·Math Problem Solving: Tunnel through Bald Mountain Algebra 1, Part 1 ·Special Topics (Alg 1.1) ·Scaling and Proportion, Part 1 (Alg 1.1) ·Scaling and Proportion, Part 2 (Alg. 1.1)</p>

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			<p>Goal 4.2: Apply the geometry of right triangles.</p> <p>9.M.4.2.1 Given the Pythagorean Theorem, calculate a missing side length of a right triangle where the legs and hypotenuse are natural numbers.</p> <p>Goal 4.3: Apply graphing in two dimensions.</p> <p>9.M.4.3.1 Identify attributes of the Cartesian Coordinate System, such as quadrants, origin, and axes.</p>	<p>Goal 4.2: Apply the geometry of right triangles.</p> <p>9.M.4.2.1 Given the Pythagorean Theorem, calculate a missing side length of a right triangle where the legs and hypotenuse are natural numbers. PLATO® Geometry and Measurement 1 Geometry The Pythagorean Theorem 1 Using Geometry PLATO® Geometry and Measurement 2 Triangles and Lines The Pythagorean Theorem 2 Solving Right Triangle Problems Solid and Coordinate Geometry The Distance Formula PLATO® Algebra 2, Part 2 Coordinates and Curves (Alg 2.2) Distance between 2 Points (Alg 2.2)</p> <p>Goal 4.3: Apply graphing in two dimensions.</p> <p>9.M.4.3.1 Identify attributes of the Cartesian Coordinate System, such as quadrants, origin, and axes. PLATO® Algebra 1, Part 1 Graphing Basics (Alg 1.1) Coordinate Plane (Alg 1.1) Identifying Points on a Coordinate Plane (Alg 1.1) PLATO® Algebra 2, Part 1 Graphs and Linear Equations (Alg 2.1) The Coordinate Plane (Alg 2.1)</p>

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			<p>9.M.4.3.2 Graph scatter plots and identify informal trend lines (e.g., eyeball fit lines).</p>	<p>9.M.4.3.2 Graph scatter plots and identify informal trend lines (e.g., eyeball fit lines). PLATO® Quality Fundamentals Charting and Graphing Charts and Graphs for Quality Interpreting Scatter Diagrams</p>
			<p>9.M.4.3.3 Identify positive and negative correlations.</p>	<p>9.M.4.3.3 Identify positive and negative correlations. PLATO® Quality Fundamentals Charting and Graphing Charts and Graphs for Quality Interpreting Scatter Diagrams</p>
			<p>Goal 4.4: Represent and graph linear relationships.</p>	<p>Goal 4.4: Represent and graph linear relationships.</p>
			<p>9.M.4.4.1 Create graphs and equations for linear relationships.</p>	<p>9.M.4.4.1 Create graphs and equations for linear relationships. PLATO® Math Problem Solving Beginning Algebra Math Problem Solving: Tunnel through Bald Mountain Intermediate Algebra Math Problem Solving: Video Rental Math Problem Solving: Running a Race Advanced Algebra Math Problem Solving: Car Rental Math Problem Solving: Building Boats</p>

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			<p>9.M.4.4.2 Represent linear relationships using tables, graphs, and mathematical symbols.</p>	<p>PLATO® Algebra 1, Part 1 Graphing Basics (Alg 1.1) Graphing Linear Equations in 2 Variables (Alg 1.1) Solving and Graphing Systems of Equations (Alg 1.1) Introduction to Functions (Alg 1.1) Linear Patterns (Alg 1.1) Graphs, Slopes, and y-Intercepts (Alg 1.1) PLATO® Algebra 2, Part 1 Graphs and Linear Equations (Alg 2.1) Solutions of Linear Equations as Ordered Pairs (Alg 2.1) Graphing a Linear Equation in 2 Variables (Alg 2.1) Using the Slope and y-Intercept to graph a Line (Alg 2.1) Identifying Graphs from Their Equations (Alg 2.1) Review: Graphs (Alg 2.1) Linear Systems of Equations and Inequalities (Alg 2.1) Solving Linear Systems of Equations: Graphs (Alg 2.1) Solving Problems with Linear Systems (Alg 2.1) Review: Linear Systems (Alg 2.1) PLATO® Algebra 2, Part 2 Functions and their Graphs (Alg 2.2) Equations and Graphs of Functions, Part 2 (Alg 2.2)</p> <p>9.M.4.4.2 Represent linear relationships using tables, graphs, and mathematical symbols. PLATO® Math Problem Solving Beginning Algebra Math Problem Solving: Tunnel through Bald Mountain Intermediate Algebra Math Problem Solving: Video Rental Advanced Algebra Math Problem Solving: Car Rental PLATO® Algebra 1, Part 1 Math Sentences (Alg 1.1) Determining the Truth Value of a Statement (Alg 1.1) Graphing Basics (Alg 1.1)</p>

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			<p>9.M.4.4.3 Interpret attributes of linear relationships such as slope, rate of change, and intercepts.</p>	<p>Ordered Pairs as Solutions of Linear Equations (Alg 1.1) Graphing Linear Equations in 2 Variables (Alg 1.1) Introduction to Functions (Alg 1.1) Functions (Alg 1.1) Describing Functions with Equations, Tables, and Graphs (Alg 1.1) Linear Patterns (Alg 1.1) Graphs, Slopes, and y-Intercepts (Alg 1.1) PLATO® Algebra 2, Part 1 Graphs and Linear Equations (Alg 2.1) Solutions of Linear Equations as Ordered Pairs (Alg 2.1) Graphing a Linear Equation in 2 Variables (Alg 2.1) Using the Slope and y-Intercept to graph a Line (Alg 2.1) Identifying Graphs from Their Equations (Alg 2.1) Review: Graphs (Alg 2.1) PLATO® Algebra 2, Part 2 Functions and their Graphs (Alg 2.2) Defining a Function with Its Rule (Alg 2.2) Functions and their Graphs (Alg 2.2) Finding Values of a Function Using Its Rule (Alg 2.2) Functions and their Graphs (Alg 2.2) Equations and Graphs of Functions, Part 2 (Alg 2.2)</p> <p>9.M.4.4.3 Interpret attributes of linear relationships such as slope, rate of change, and intercepts. PLATO® Algebra 1, Part 1 Introduction to Functions (Alg 1.1) Linear Patterns (Alg 1.1) Graphs, Slopes, and y-Intercepts (Alg 1.1) Equations, Graphs, Slopes, and y-Intercepts (Alg 1.1) PLATO® Algebra 2, Part 1 Graphs and Linear Equations (Alg 2.1) Slope of a Line from 2 Points (Alg 2.1) The y-Intercept of a Line (Alg 2.1) Using the Slope and y-Intercept to graph a Line (Alg 2.1) Finding the Slope and y-Intercept from an Equation (Alg 2.1) Review: Graphs (Alg 2.1) PLATO® Algebra 2, Part 2</p>

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	<p>Standard 5: Data Analysis, Probability, and Statistics</p>	<p>Standard 5: Data Analysis, Probability, and Statistics</p> <p>Students in Grade 9 interpret and use basic statistical concepts including mean, median, mode, range, and distribution of data, including outliers. Students make predictions and draw conclusions based on statistical measures and students make predictions based on randomness, chance, equally likely events, and probability. Students find probabilities based on dependent, independent, and compound events and students make predictions based on</p>	<p>Standard 5: Data Analysis, Probability, and Statistics</p> <p>Goal 5.1: Represent data with a variety of formats.</p> <p>9.M.5.1.1 Analyze and interpret tables, charts, and graphs, including scatter plots, broken line graphs, and box-and-whisker plots.</p>	<p>Coordinates and Curves (Alg 2.2) Calculating the Slope of a Line (Alg 2.2) Point-Slope and Slope-Intercept Forms of Equations (Alg 2.2)</p> <p>Standard 5: Data Analysis, Probability, and Statistics</p> <p>Goal 5.1: Represent data with a variety of formats.</p> <p>9.M.5.1.1 Analyze and interpret tables, charts, and graphs, including scatter plots, broken line graphs, and box-and-whisker plots. PLATO® Math Problem Solving Data Skills Math Problem Solving: Planning a Playground Math Problem Solving: Growing Lilies Probability and Statistics Math Problem Solving: Making the Grade Math Problem Solving: Statistics for Quality PLATO® Data Skills Reading Graphical Data Introduction to Line Graphs Reading Line Graphs Introduction to Data in Tables Reading Data in Tables Introduction to Flowcharts Computing Graphical Data Graphing and Charting Tables Using Line Graphs Reading Complex Charts and Graphs Reading Complex Tables Reading Complex Flowcharts PLATO® Quality Fundamentals</p>

Grade Level 9	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>9.M.5.3.1 Interpret and use basic statistical concepts, including mean, median, mode, range, and distribution of data, including outliers.</p> <p>9.M.5.3.2 Make predictions and draw conclusions based on statistical measures.</p>	<p>9.M.5.3.1 Interpret and use basic statistical concepts, including mean, median, mode, range, and distribution of data, including outliers. PLATO® Math Problem Solving Data Skills Math Problem Solving: Growing Lilies Probability and Statistics Math Problem Solving: Making the Grade Math Problem Solving: Statistics for Quality PLATO® Data Skills Reading Complex Charts and Graphs Reading Histograms PLATO® Algebra 1, Part 1 Special Topics (Alg 1.1) Mean, Median, and Mode (Alg 1.1) Solving Problems with Mean, Median, and Mode (Alg 1.1) PLATO® Quality Fundamentals Charting and Graphing Interpreting Histograms Basic Statistics</p> <p>9.M.5.3.2 Make predictions and draw conclusions based on statistical measures. PLATO® Math Problem Solving Data Skills Math Problem Solving: Planning a Playground Math Problem Solving: Growing Lilies Advanced Algebra Math Problem Solving: Saving the Birds Probability and Statistics Math Problem Solving: Making the Grade Math Problem Solving: Statistics for Quality</p>

Grade Level 9	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>Goal 5.4: Understand basic concepts of probability. 9.M.5.4.1 Find probabilities based on dependent, independent, and compound events.</p> <p>9.M.5.4.2 Contrast experimental and theoretical probability.</p> <p>Goal 5.5: Make predictions or decisions based on data.</p> <p>9.M.5.5.1 Make predictions based on randomness, chance, equally likely events, and probability.</p>	<p>Goal 5.4: Understand basic concepts of probability. 9.M.5.4.1 Find probabilities based on dependent, independent, and compound events. PLATO® Algebra 2, Part 1 Probability (Alg 2.1) Multiplication Principle of Counting (Alg 2.1)</p> <p>9.M.5.4.2 Contrast experimental and theoretical probability. Algebra 1, Part 1 ·Special Topics (Alg 1.1) ·Probability and Possible Outcomes (Alg 1.1)</p> <p>Goal 5.5: Make predictions or decisions based on data.</p> <p>9.M.5.5.1 Make predictions based on randomness, chance, equally likely events, and probability. PLATO® Algebra 2, Part 1 Probability (Alg 2.1) Determining the Probability of an Event (Alg 2.1) Review: Probability (Alg 2.1)</p>

Grade Level 9	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>9.M.5.5.2 Use appropriate tools/technology to conduct simulations and employ graphical models to make predictions or decisions based on data.</p>	<p>9.M.5.5.2 Use appropriate tools/technology to conduct simulations and employ graphical models to make predictions or decisions based on data. PLATO® Math Problem Solving Data Skills Math Problem Solving: Planning a Playground Math Problem Solving: Growing Lilies Advanced Algebra Math Problem Solving: Saving the Birds Probability and Statistics Math Problem Solving: Making the Grade Math Problem Solving: Statistics for Quality PLATO® Data Skills Reading Graphical Data Introduction to Data in Tables Reading Data in Tables Computing Graphical Data Tables Reading Complex Charts and Graphs Reading Complex Tables</p>

Grade Level 9	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>9.M.5.5.3 Design, conduct, and interpret results of statistical experiments.</p>	<p>9.M.5.5.3 Design, conduct, and interpret results of statistical experiments. PLATO® Math Problem Solving Data Skills Math Problem Solving: Planning a Playground Math Problem Solving: Growing Lilies Beginning Algebra Math Problem Solving: Tunnel through Bald Mountain Advanced Algebra Math Problem Solving: Saving the Birds Probability and Statistics Math Problem Solving: Making the Grade Math Problem Solving: Statistics for Quality PLATO® Data Skills Reading Graphical Data Introduction to Data in Tables Reading Data in Tables Introduction to Flowcharts Computing Graphical Data Tables Reading Complex Charts and Graphs Reading Complex Tables Reading Complex Flowcharts Constructing Graphs and Charts Selecting Graphs and Charts PLATO® Quality Fundamentals Charting and Graphing Charts and Graphs for Quality</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
Grade 10	Standard 1: Number and Operation	<p>Standard 1: Number and Operation</p> <p>Students in Grade 10 deepen their understanding of real numbers by applying properties of rational numbers and exponents and by identifying exact and approximate roots without simplification. Students use positive and negative numbers, absolute value, fractions, decimals, percentages, and scientific notation. Students use the proper order of operations and perform operations with rational numbers. Students apply number sense to everyday situations and judge reasonableness of answers.</p> <p>Standard 1: Number and Operation</p>	<p>Standard 1: Number and Operation</p> <p>Goal 1.1: Understand and use numbers.</p> <p>10.M.1.1.1 Apply properties of rational numbers.</p> <p>10.M.1.1.2 Use positive and negative numbers, absolute value, fractions, decimals, percentages, and scientific notation, including application in real world situations. (</p> <p>10.M.1.1.3 Apply properties of exponents.</p>	<p>Standard 1: Number and Operation</p> <p>Goal 1.1: Understand and use numbers.</p> <p>10.M.1.1.2 Use positive and negative numbers, absolute value, fractions, decimals, percentages, and scientific notation, including application in real world situations. PLATO® Algebra 1, Part 2 Sets and Numbers (Alg 1.2) Additive Inverse of an Integer (Alg 1.2) Equations and Inequalities (Alg 1.2) Absolute Value of a Number (Alg 1.2) Equations with Absolute Values (Alg 1.2) Review: Equations and Inequalities (Alg 1.2) PLATO® Algebra 2, Part 2 Special Equations and Inequalities (Alg 2.2) Evaluating Expressions with Absolute Value (Alg 2.2) Absolute Value, Inequalities, and Interval Notation (Alg 2.2)</p> <p>10.M.1.1.2 Use positive and negative numbers, absolute value, fractions, decimals, percentages, and scientific notation, including application in real world situations. (</p> <p>10.M.1.1.3 Apply properties of exponents. Algebra 1, Part 1 ·Basic Number Ideas (Alg 1.1) ·Exponents: Product Rule (Alg 1.1) ·Exponents: Power Rule (Alg 1.1) ·Square Roots of Imperfect Squares (Alg 1.1) Calculus 2 ·The Natural Logarithm ·Properties of the Natural Logarithm</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>10.M.1.1.4 Identify exact and approximate roots without simplification.</p> <p>10.M.1.1.5 Solve problems using number theory concepts (factors, multiples, primes).</p> <p>10.M.1.1.6 Use appropriate vocabulary.</p>	<p>·Other Logarithm and Exponential Functions ·Properties of Graphs...Logarithm Functions</p> <p>10.M.1.1.4 Identify exact and approximate roots without simplification. PLATO® Algebra 1, Part 2 Sets and Numbers (Alg 1.2) Square Roots of Integers (Alg 1.2) Review: Exponents and Radicals (Alg 1.2) PLATO® Algebra 2, Part 2 Numbers and their Properties (Alg 2.2) Rules for Exponents and Radicals (Alg 2.2)</p> <p>10.M.1.1.5 Solve problems using number theory concepts (factors, multiples, primes). PLATO® Algebra 1, Part 2 Sets and Numbers (Alg 1.2) Review: Fractions and Sets (Alg 1.2)</p> <p>10.M.1.1.6 Use appropriate vocabulary. Algebra 1 Investigations Projects for the Real World Level I</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>Goal 1.2: Perform computations accurately.</p> <p>10.M.1.2.1 Use the order of operations and perform operations with rational numbers.</p> <p>Goal 1.3: Estimate and judge reasonableness of results.</p> <p>10.M.1.3.1 Apply number sense to everyday situations and judge reasonableness of results.</p>	<p>Goal 1.2: Perform computations accurately.</p> <p>10.M.1.2.1 Use the order of operations and perform operations with rational numbers. PLATO® Algebra 1, Part 2 Sets and Numbers (Alg 1.2) Adding Fractions (Alg 1.2) Subtracting Fractions (Alg 1.2) Product of Fractions (Alg 1.2) Quotient of Fractions (Alg 1.2) Review: Fractions and Sets (Alg 1.2)</p> <p>Goal 1.3: Estimate and judge reasonableness of results.</p> <p>10.M.1.3.1 Apply number sense to everyday situations and judge reasonableness of results. PLATO® Math Problem Solving Math Fundamentals Math Problem Solving: Building a Highway Math Problem Solving: Running a Business Data Skills Math Problem Solving: Planning a Playground Math Problem Solving: Growing Lilies Beginning Algebra Math Problem Solving: Plan for Fishing Trip Math Problem Solving: Tunnel through Bald Mountain Intermediate Algebra</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>10.M.1.3.2 Identify that error accumulates in a computation when there is rounding.</p>	<p>Math Problem Solving: Running a Race Advanced Algebra Math Problem Solving: Car Rental Math Problem Solving: Building Boats Math Problem Solving: Saving the Birds Geometry and Measurement Math Problem Solving: Planning a Park Math Problem Solving: Shelf Space Probability and Statistics Math Problem Solving: The Fund Raiser Math Problem Solving: Making the Grade Math Problem Solving: Statistics for Quality PLATO® Applied Mathematics Applied Math Estimating</p> <p>10.M.1.3.2 Identify that error accumulates in a computation when there is rounding. PLATO® Math Problem Solving Math Fundamentals Math Problem Solving: Building a Highway Beginning Algebra Math Problem Solving: Tunnel through Bald Mountain Intermediate Algebra Math Problem Solving: Running a Race PLATO® Applied Mathematics Applied Math Estimating</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
	<p>Standard 2: Concepts and Principles of Measurement</p>	<p>Standard 2: Concepts and Principles of Measurement</p> <p>Students in Grade 10, given relative formulas, determine length, distance, area, surface area, capacity, and weight, with appropriate unit labels. Students formulate and use proportions, ratios, and scaling. Students apply concepts of rates and direct and indirect measurements. Students evaluate given measurement formulas for two- and three-dimensional objects.</p>	<p>Standard 2: Concepts and Principles of Measurement</p> <p>Goal 2.1: Understand and use U.S. customary and metric measurements.</p> <p>10.M.2.1.1 Given the formulas, find the circumference, perimeter, or area of triangles, circles, and quadrilaterals, the volume of spheres, non-oblique prisms, cylinders, and cones, and the surface area of spheres, non-oblique prisms, cylinders, and right square-based pyramids.</p>	<p>Standard 2: Concepts and Principles of Measurement</p> <p>Goal 2.1: Understand and use U.S. customary and metric measurements.</p> <p>10.M.2.1.1 Given the formulas, find the circumference, perimeter, or area of triangles, circles, and quadrilaterals, the volume of spheres, non-oblique prisms, cylinders, and cones, and the surface area of spheres, non-oblique prisms, cylinders, and right square-based pyramids.</p> <p>PLATO® Math Problem Solving Geometry and Measurement Math Problem Solving: Planning a Park Math Problem Solving: Shelf Space PLATO® Geometry and Measurement 1 Geometry Circles/Arcs/Circumferences Using Geometry Measurement Area, Part 1 Area, Part 2 Volume Using Measurement PLATO® Geometry and Measurement 2 Transformations, Symmetry, and Area Area of Right Triangles and Parallelograms Area of Any Triangle Area of Trapezoids and Rhombuses Circles Measuring Circumference The Area of Circles Solids and Coordinate Geometry Area and Volume of Cylinders Area and Volume of Cones</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>10.M.2.2.1 Use rates, ratios, proportions, map scales, and scale factors (one- and two dimensional) in problem-solving situations.</p> <p>10.M.2.2.2 Apply concepts of rates and direct and indirect measurements.</p>	<p>10.M.2.2.1 Use rates, ratios, proportions, map scales, and scale factors (one- and two-dimensional) in problem-solving situations. PLATO® Math Problem Solving Math Fundamentals Math Problem Solving: Building a Highway Math Problem Solving: Smart Shopping Math Problem Solving: Car Costs Math Problem Solving: Running a Business Beginning Algebra Math Problem Solving: Plan for Fishing Trip Math Problem Solving: Tunnel through Bald Mountain Math Problem Solving: Bean-Counting Advanced Algebra Math Problem Solving: Building Boats Math Problem Solving: Saving the Birds Geometry and Measurement Math Problem Solving: Planning a Park Math Problem Solving: Shelf Space Probability and Statistics Math Problem Solving: The Fund Raiser PLATO® Algebra 1, Part 2 Equations and Inequalities (Alg 1.2) Solving Problems with Linear Equations in 1 Variable (Alg 1.2)</p> <p>10.M.2.2.2 Apply concepts of rates and direct and indirect measurements. PLATO® Math Problem Solving Beginning Algebra Math Problem Solving: Tunnel through Bald Mountain Intermediate Algebra Math Problem Solving: Running a Race Geometry and Measurement Math Problem Solving: Shelf Space</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
	<p>Standard 3: Concepts and Language of Algebra and Functions</p>	<p>Standard 3: Concepts and Language of Algebra and Functions</p> <p>Students in Grade 10 use appropriate procedures for manipulating and simplifying algebraic expressions involving variables, integers, rational numbers, and for solving multi-step, firstdegree equations and inequalities. Students understand the concept and</p>	<p>10.M.2.4.1 Determine and use appropriate units.</p> <p>10.M.2.4.2 Approximate error in measurement situations.</p> <p>Standard 3: Concepts and Language of Algebra and Functions</p> <p>Goal 3.1: Use algebraic symbolism as a tool to represent mathematical relationships.</p> <p>10.M.3.1.1 Represent mathematical relationships using variables, expressions, linear equations and inequalities.</p>	<p>10.M.2.4.1 Determine and use appropriate units. PLATO® Math Problem Solving Geometry and Measurement Math Problem Solving: Planning a Park Math Problem Solving: Shelf Space PLATO® Applied Mathematics Applied Math Using Linear Measurement Tools</p> <p>10.M.2.4.2 Approximate error in measurement situations. PLATO® Applied Mathematics Applied Math Using Linear Measurement Tools</p> <p>Standard 3: Concepts and Language of Algebra and Functions</p> <p>Goal 3.1: Use algebraic symbolism as a tool to represent mathematical relationships.</p> <p>10.M.3.1.1 Represent mathematical relationships using variables, expressions, linear equations and inequalities. PLATO® Math Problem Solving Beginning Algebra Math Problem Solving: Plan for Fishing Trip Intermediate Algebra Math Problem Solving: Video Rental Math Problem Solving: Running a Race Advanced Algebra Math Problem Solving: Car Rental Math Problem Solving: Building Boats</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
		<p>applications of functions and mathematical models. Given graphs, charts, ordered pairs, mappings, or equations, students determine whether a relation is a function. Students evaluate functions written in functional notation and, given a function, students identify domain and range.</p> <p>Idaho Achievement Standards/Grade 10/Mathematics/2-1-06 Page 50</p> <p>Goal 3.1: Use algebraic symbolism as a tool to represent mathematical relationships.</p>	<p>Goal 3.2: Evaluate algebraic expressions.</p> <p>10.M.3.2.1 Use appropriate procedures for manipulating and simplifying algebraic expressions involving variables, integers, and rational numbers.</p> <p>Goal 3.3: Solve algebraic equations and inequalities.</p>	<p>Math Problem Solving: Saving the Birds PLATO® Algebra 1, Part 1 Math Sentences (Alg 1.1) Expressions in 1 Variable (Alg 1.1) PLATO® Algebra 1, Part 2 Equations and Inequalities (Alg 1.2) Solving Problems with Linear Equations in 1 Variable (Alg 1.2)</p> <p>Goal 3.2: Evaluate algebraic expressions.</p> <p>10.M.3.2.1 Use appropriate procedures for manipulating and simplifying algebraic expressions involving variables, integers, and rational numbers.</p> <p>PLATO® Algebra 1, Part 1 Math Sentences (Alg 1.1) Expressions in 1 Variable (Alg 1.1) PLATO® Algebra 1, Part 2 Polynomials and Factoring (Alg 1.2) Value of a Polynomial (Alg 1.2) Polynomial Sum (Alg 1.2) Polynomial Difference (Alg 1.2) Simplifying Polynomial Expressions (Alg 1.2) PLATO® Algebra 2, Part 1 Rational Expressions (Alg 2.1) Evaluating Rational Expressions (Alg 2.1) PLATO® Algebra 2, Part 2 Numbers and their Properties (Alg 2.2) Simplifying Algebraic Expressions (Alg 2.2)</p> <p>Goal 3.3: Solve algebraic equations and inequalities.</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>10.M.3.3.1 Use appropriate procedures to solve multi-step, first-degree equations and inequalities; such as $3(2x - 5) = 5x + 7$ or $3(2x - 5) > 5x + 7$.</p> <p>10.M.3.3.2 Differentiate between linear and non-linear equations and graphs.</p> <p>Goal 3.4: Solve simple linear systems of equations.</p>	<p>10.M.3.3.1 Use appropriate procedures to solve multi-step, first-degree equations and inequalities; such as $3(2x - 5) = 5x + 7$ or $3(2x - 5) > 5x + 7$. PLATO® Math Problem Solving Intermediate Algebra Math Problem Solving: Video Rental PLATO® Algebra 1, Part 2 Equations and Inequalities (Alg 1.2) More Difficult Linear Equations in 1 Variable (Alg 1.2) Linear Inequalities in 1 Variable, Part 1 (Alg 1.2) Linear Inequalities in 1 Variable, Part 2 (Alg 1.2) Linear Inequalities in 1 Variable, Part 3 (Alg 1.2) Review: Equations and Inequalities (Alg 1.2) PLATO® Algebra 2, Part 2 Special Equations and Inequalities (Alg 2.2) Graphing Linear Inequalities in 1 Variable (Alg 2.2)</p> <p>10.M.3.3.2 Differentiate between linear and non-linear equations and graphs. PLATO® Math Problem Solving Advanced Algebra Math Problem Solving: Building Boats PLATO® Algebra 2, Part 2 Functions and their Graphs (Alg 2.2) Solving Problems with Linear Functions (Alg 2.2)</p> <p>Goal 3.4: Solve simple linear systems of equations.</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>10.M.3.4.1 Use appropriate procedures to solve linear systems of equations involving two variables; such as $x + y = 7$ and $2x + 3y = 21$.</p> <p>Goal 3.5: Understand the concept of functions.</p> <p>10.M.3.5.1 Given graphs, charts, ordered pairs, mappings, or equations, determine whether a relation is a function.</p>	<p>10.M.3.4.1 Use appropriate procedures to solve linear systems of equations involving two variables; such as $x + y = 7$ and $2x + 3y = 21$. (350.04.a) PLATO® Math Problem Solving Intermediate Algebra Math Problem Solving: Video Rental Math Problem Solving: Running a Race Advanced Algebra Math Problem Solving: Car Rental Math Problem Solving: Building Boats PLATO® Algebra 2, Part 1 Linear Systems of Equations and Inequalities (Alg 2.1) Solving Linear Systems of Equations: Graphs (Alg 2.1) Solving Linear Systems of Inequalities: Graphs (Alg 2.1) Solving Problems with Linear Systems (Alg 2.1) Review: Linear Systems (Alg 2.1)</p> <p>Goal 3.5: Understand the concept of functions.</p> <p>10.M.3.5.1 Given graphs, charts, ordered pairs, mappings, or equations, determine whether a relation is a function. PLATO® Algebra 2, Part 2 Functions and their Graphs (Alg 2.2) Defining a Function with Its Rule (Alg 2.2) Functions and their Graphs (Alg 2.2) Finding Values of a Function Using Its Rule (Alg 2.2) Functions and their Graphs (Alg 2.2) Equations and Graphs of Functions, Part 1 (Alg 2.2)</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>10.M.3.6.1 Model and solve real-world phenomena using multi-step, first degree, single variable equations and inequalities, linear equations, and two-variable linear systems of equations.</p>	<p>10.M.3.6.1 Model and solve real-world phenomena using multi-step, first degree, single variable equations and inequalities, linear equations, and two-variable linear systems of equations.</p> <p>PLATO® Math Problem Solving Beginning Algebra Math Problem Solving: Plan for Fishing Trip Math Problem Solving: Tunnel through Bald Mountain Math Problem Solving: Bean-Counting Intermediate Algebra Math Problem Solving: Video Rental Math Problem Solving: Running a Race Advanced Algebra Math Problem Solving: Car Rental Math Problem Solving: Building Boats Math Problem Solving: Saving the Birds PLATO® Algebra 1, Part 2 Equations and Inequalities (Alg 1.2) Solving Problems with Linear Equations in 1 Variable (Alg 1.2) Review: Equations and Inequalities (Alg 1.2) PLATO® Algebra 2, Part 1 Linear Systems of Equations and Inequalities (Alg 2.1) Solving Problems with Linear Systems (Alg 2.1) Review: Linear Systems (Alg 2.1) PLATO® Algebra 2, Part 2 Special Equations and Inequalities (Alg 2.2) Graphing Linear Inequalities in 1 Variable (Alg 2.2) Functions and their Graphs (Alg 2.2) Equations and Graphs of Functions, Part 2 (Alg 2.2) Composite Functions (Alg 2.2) Solving Problems with Linear Functions (Alg 2.2)</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>10.M.3.6.2 Use graphs and sequences to represent and solve problems.</p>	<p>10.M.3.6.2 Use graphs and sequences to represent and solve problems. PLATO® Math Problem Solving Beginning Algebra Math Problem Solving: Tunnel through Bald Mountain Intermediate Algebra Math Problem Solving: Video Rental Math Problem Solving: Running a Race Advanced Algebra Math Problem Solving: Car Rental Math Problem Solving: Building Boats Math Problem Solving: Saving the Birds PLATO® Algebra 1, Part 2 Equations and Inequalities (Alg 1.2) Review: Equations and Inequalities (Alg 1.2) PLATO® Algebra 2, Part 1 Graphs and Linear Equations (Alg 2.1) Graphing a Linear Equation in 2 Variables (Alg 2.1) Using the Slope and y-Intercept to graph a Line (Alg 2.1) Identifying Graphs from Their Equations (Alg 2.1) Review: Graphs (Alg 2.1) Linear Systems of Equations and Inequalities (Alg 2.1) Solving Linear Systems of Equations: Graphs (Alg 2.1) Solving Problems with Linear Systems (Alg 2.1) Review: Linear Systems (Alg 2.1) PLATO® Algebra 2, Part 2 Functions and their Graphs (Alg 2.2) Equations and Graphs of Functions, Part 2 (Alg 2.2) Translations and Transformations (Alg 2.2) Solving Problems with Linear Functions (Alg 2.2)</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
	<p>Standard 4: Concepts and Principles of Geometry</p>	<p>Standard 4: Concepts and Principles of Geometry</p> <p>Students in Grade 10 recognize congruency and similarity of two-dimensional figures. Students identify and use similarity as it relates to size variations in two- and three-dimensional objects. Given the Pythagorean Theorem, students calculate missing side lengths of right triangles without simplifying radicals. Students represent linear relationships using tables, graphs, and mathematical symbols. Students interpret attributes of linear relationships such as slope, rate of change, and intercepts. Students use logic to make and evaluate mathematical</p>	<p>Standard 4: Concepts and Principles of Geometry</p> <p>Goal 4.1: Apply concepts of size, shape, and spatial relationships.</p> <p>10.M.4.1.1 Recognize and apply congruency and similarity of two-dimensional figures.</p> <p>10.M.4.1.2 Recognize and use similarity as it relates to size variations in two- and three dimensional objects.</p>	<p>Standard 4: Concepts and Principles of Geometry</p> <p>Goal 4.1: Apply concepts of size, shape, and spatial relationships.</p> <p>10.M.4.1.1 Recognize and apply congruency and similarity of two-dimensional figures. PLATO® Geometry and Measurement 2 Introduction to Geometry Congruent Angles Triangles and Lines Congruent Triangles, Part 1</p> <p>10.M.4.1.2 Recognize and use similarity as it relates to size variations in two- and three dimensional objects. Math Fundamentals ·Ratio/Proportion/Percent ·Proportion Concepts ·Ratio/Proportion/Percent Review ·Problem Solving 6 ·Geometry and Measurement ·Figure Comparison ·Basic Figures Review Math Problem Solving ·Math Fundamentals ·Math Problem Solving: Running a Business ·Beginning Algebra ·Math Problem Solving: Tunnel through Bald Mountain Algebra 1, Part 1 ·Special Topics (Alg 1.1) ·Scaling and Proportion, Part 1 (Alg 1.1) ·Scaling and Proportion, Part 2 (Alg. 1.1)</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
		arguments.	<p>Goal 4.2: Apply the geometry of right triangles.</p> <p>10.M.4.2.1 Given the Pythagorean Theorem, calculate missing side lengths of right triangles without simplifying radicals.</p> <p>Goal 4.3: Apply graphing in two dimensions.</p> <p>10.M.4.3.1 Identify attributes of the Cartesian Coordinate System, such as quadrants, origin, and axes.</p> <p>10.M.4.3.2 Graph scatter plots and identify informal trend lines (e.g., eyeball fit lines).</p>	<p>Goal 4.2: Apply the geometry of right triangles.</p> <p>10.M.4.2.1 Given the Pythagorean Theorem, calculate missing side lengths of right triangles without simplifying radicals. PLATO® Geometry and Measurement 1 Geometry The Pythagorean Theorem 1 Using Geometry PLATO® Geometry and Measurement 2 Triangles and Lines The Pythagorean Theorem 2 Solving Right Triangle Problems Solid and Coordinate Geometry The Distance Formula PLATO® Algebra 2, Part 2 Coordinates and Curves (Alg 2.2) Distance between 2 Points (Alg 2.2)</p> <p>Goal 4.3: Apply graphing in two dimensions.</p> <p>10.M.4.3.1 Identify attributes of the Cartesian Coordinate System, such as quadrants, origin, and axes. PLATO® Algebra 2, Part 1 Graphs and Linear Equations (Alg 2.1) The Coordinate Plane (Alg 2.1)</p> <p>10.M.4.3.2 Graph scatter plots and identify informal trend lines (e.g., eyeball fit lines). PLATO® Quality Fundamentals</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>10.M.4.3.3 Identify positive and negative correlations.</p> <p>Goal 4.4: Represent and graph linear relationships.</p> <p>10.M.4.4.1 Create graphs and equations for linear relationships.</p>	<p>Charting and Graphing Charts and Graphs for Quality Interpreting Scatter Diagrams</p> <p>10.M.4.3.3 Identify positive and negative correlations. PLATO® Quality Fundamentals Charting and Graphing Charts and Graphs for Quality Interpreting Scatter Diagrams</p> <p>Goal 4.4: Represent and graph linear relationships.</p> <p>10.M.4.4.1 Create graphs and equations for linear relationships. PLATO® Math Problem Solving Beginning Algebra Math Problem Solving: Tunnel through Bald Mountain Intermediate Algebra Math Problem Solving: Video Rental Math Problem Solving: Running a Race Advanced Algebra Math Problem Solving: Car Rental Math Problem Solving: Building Boats PLATO® Algebra 2, Part 1 Graphs and Linear Equations (Alg 2.1) Solutions of Linear Equations as Ordered Pairs (Alg 2.1) Graphing a Linear Equation in 2 Variables (Alg 2.1) Using the Slope and y-Intercept to graph a Line (Alg 2.1) Identifying Graphs from Their Equations (Alg 2.1) Review: Graphs (Alg 2.1) Linear Systems of Equations and Inequalities (Alg 2.1) Solving Linear Systems of Equations: Graphs (Alg 2.1)</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
	<p>Standard 5: Data Analysis, Probability, and Statistics</p>	<p>Standard 5: Data Analysis, Probability, and Statistics Students in Grade 10 read, interpret, and use tables, charts, and graphs, including scatter plots, multiple broken line graphs, and box-and-</p>	<p>Goal 4.5: Use reasoning skills.</p> <p>10.M.4.5.1 Use logic to make and evaluate mathematical arguments.</p> <p>Standard 5: Data Analysis, Probability, and Statistics</p> <p>Goal 5.1: Represent data with a variety of formats.</p> <p>Grade10.M.5.1.1 Analyze and interpret tables, charts, and graphs, including scatter plots, multiple broken line graphs, and box-and-whisker plots.</p>	<p>Finding the Slope and y-Intercept from an Equation (Alg 2.1) Review: Graphs (Alg 2.1) PLATO® Algebra 2, Part 2 Coordinates and Curves (Alg 2.2) Calculating the Slope of a Line (Alg 2.2) Point-Slope and Slope-Intercept Forms of Equations (Alg 2.2)</p> <p>Goal 4.5: Use reasoning skills.</p> <p>10.M.4.5.1 Use logic to make and evaluate mathematical arguments. Geometry and Measurement 2 ·Introduction to Geometry ·Postulates and Theorems ·Polygons ·Summing Up Angles ·Transformations, Symmetry, and Area ·Rotations ·Circles ·Introduction to Circles ·Tangents ·Inscribed Angles ·Circles and Segments</p> <p>Standard 5: Data Analysis, Probability, and Statistics</p> <p>Goal 5.1: Represent data with a variety of formats.</p> <p>10.M.5.1.1 Analyze and interpret tables, charts, and graphs, including scatter plots, multiple broken line graphs, and box-and-whisker plots. PLATO® Math Problem Solving Data Skills</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
		<p>whisker plots. Students interpret and use basic statistical concepts including mean, median, mode, range, and distribution of data, including outliers. Students make predictions and draw conclusions based on statistical measures and students make predictions based on randomness, chance, equally likely events, and probability. Students find probabilities based on dependent, independent, and compound events and students make predictions based on randomness, chance, equally likely events, and probability.</p>	<p>Goal 5.2: Collect, organize, and display data.</p> <p>10.M.5.2.1 Collect, organize, and display data in tables, charts, and graphs.</p>	<p>Math Problem Solving: Planning a Playground Math Problem Solving: Growing Lilies Probability and Statistics Math Problem Solving: Making the Grade Math Problem Solving: Statistics for Quality PLATO® Data Skills Reading Graphical Data Introduction to Line Graphs Reading Line Graphs Introduction to Data in Tables Reading Data in Tables Introduction to Flowcharts Computing Graphical Data Graphing and Charting Tables Using Line Graphs Reading Complex Charts and Graphs Reading Complex Tables Reading Complex Flowcharts PLATO® Quality Fundamentals Charting and Graphing Charts and Graphs for Quality Interpreting Scatter Diagrams</p> <p>Goal 5.2: Collect, organize, and display data.</p> <p>10.M.5.2.1 Collect, organize, and display data in tables, charts, and graphs. PLATO® Math Problem Solving Data Skills Math Problem Solving: Planning a Playground Math Problem Solving: Growing Lilies Beginning Algebra Math Problem Solving: Tunnel through Bald Mountain</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>Goal 5.3: Apply simple statistical measurements.</p> <p>10.M.5.3.1 Interpret and use basic statistical concepts, including mean, median, mode, range, and distribution of data, including outliers.</p>	<p>Advanced Algebra Math Problem Solving: Saving the Birds Probability and Statistics Math Problem Solving: Making the Grade PLATO® Data Skills Computing Graphical Data Tables Constructing Graphs and Charts Constructing Histograms Selecting Graphs and Charts</p> <p>Goal 5.3: Apply simple statistical measurements.</p> <p>10.M.5.3.1 Interpret and use basic statistical concepts, including mean, median, mode, range, and distribution of data, including outliers.</p> <p>PLATO® Math Problem Solving Data Skills Math Problem Solving: Growing Lilies Probability and Statistics Math Problem Solving: Making the Grade Math Problem Solving: Statistics for Quality PLATO® Data Skills Reading Complex Charts and Graphs Reading Histograms PLATO® Quality Fundamentals Charting and Graphing Interpreting Histograms Basic Statistics</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>Goal 5.5: Make predictions or decisions based on data.</p> <p>10.M.5.5.1 Make predictions based on randomness, chance, equally likely events, and probability.</p> <p>10.M.5.5.2 Use appropriate tools/technology to conduct simulations and employ graphical models to make predictions or decisions based on data.</p>	<p>Goal 5.5: Make predictions or decisions based on data.</p> <p>10.M.5.5.1 Make predictions based on randomness, chance, equally likely events, and probability. PLATO® Algebra 2, Part 1 Probability (Alg 2.1) Determining the Probability of an Event (Alg 2.1) Review: Probability (Alg 2.1)</p> <p>10.M.5.5.2 Use appropriate tools/technology to conduct simulations and employ graphical models to make predictions or decisions based on data. PLATO® Math Problem Solving Data Skills Math Problem Solving: Planning a Playground Math Problem Solving: Growing Lilies Advanced Algebra Math Problem Solving: Saving the Birds Probability and Statistics Math Problem Solving: Making the Grade Math Problem Solving: Statistics for Quality PLATO® Data Skills Reading Graphical Data Introduction to Data in Tables Reading Data in Tables Computing Graphical Data</p>

Grade Level 10	Standard	Content Knowledge and Skills	Goals	Section/PLATO Courseware
			<p>10.M.5.5.3 Design, conduct, and interpret results of statistical experiments.</p>	<p>Tables Reading Complex Charts and Graphs Reading Complex Tables</p> <p>10.M.5.5.3 Design, conduct, and interpret results of statistical experiments. PLATO® Math Problem Solving Data Skills Math Problem Solving: Planning a Playground Math Problem Solving: Growing Lilies Beginning Algebra Math Problem Solving: Tunnel through Bald Mountain Advanced Algebra Math Problem Solving: Saving the Birds Probability and Statistics Math Problem Solving: Making the Grade Math Problem Solving: Statistics for Quality PLATO® Data Skills Reading Graphical Data Introduction to Data in Tables Reading Data in Tables Computing Graphical Data Tables Reading Complex Charts and Graphs Reading Complex Tables Constructing Graphs and Charts Selecting Graphs and Charts</p>

