Cord Bridges (3rd edition), Cord Algebra 1 (3rd edition),
Cord Geometry (3rd edition), and Cord Algebra 2 (1st edition)
correlation to NCTM Curriculum and Evaluation Standards

NCTM 9-12 Standard	Bridges Lessons	Algebra 1 Lessons	Geometry Lessons	Algebra 2 Lessons
Standard 1 Mathematics as Problem Solving In grades 9-12, the mathematics curriculum should include the refinement and extension of methods of mathematical problem solving so that all students can--				
• use, with increasing confidence, problem-solving approaches to investigate and understand mathematical content;	In each book, a 4-Step Problem Solving feature has students analyze a problem-solving situation and apply a given strategy. Students further their understanding of problem-solving in the Math Applications sections at the end of each chapter of Algebra 1, Geometry, and Algebra 2 and in the Cumulative Review sections of Bridges.			
• apply integrated mathematical problem-solving strategies to solve problems from within and outside mathematics;	Students use integrated problem-solving strategies in the Math Applications sections at the end of each chapter of Algebra 1, Geometry, and Algebra 2 and in the Cumulative Review sections of Bridges.			
• recognize and formulate problems from situations within and outside mathematics;	Students solve problems from situations within and outside mathematics in the Math Applications sections at the end of each chapter of Algebra 1, Geometry, and Algebra 2 and in the Cumulative Review sections of Bridges.			
• apply the process of mathematical modeling to real-world problem situations.	Students apply mathematical modeling of real-world situations in the Math Applications sections at the end of each chapter of Algebra 1, Geometry, and Algebra 2 and in the Cumulative Review sections of Bridges.			

NCTM 9-12 Standard	Bridges Lessons	Algebra 1 Lessons	Geometry Lessons	Algebra 2 Lessons
Standard 2 Mathematics as Communication In grades 9-12, the mathematics curriculum should include the continued development of language and symbolism to communicate mathematical ideas so that all students can--				
• reflect upon and clarify their thinking about mathematical ideas and relationships;	Students discover concepts about mathematical ideas in the Math Labs sections at the end of each chapter in Bridges, Algebra 1, Geometry, and Algebra 2.			
• formulate mathematical definitions and express generalizations discovered through investigations;	Students conduct investigations and formulate mathematical definitions in the Math Labs sections at the end of each chapter in Bridges, Algebra 1, Geometry, and Algebra 2.			
• express mathematical ideas orally and in writing;	Students answer Think and Discuss questions in every lesson. These questions are conceptual and allow for good class discussions as well as written responses.			
• read written presentations of mathematics with understanding;	Students have the opportunity to read written presentations of mathematics in the Workplace Communications feature in Algebra 1 and Geometry as well as the Cultural Connections features throughout the program.			
• ask clarifying and extending questions related to mathematics they have read or heard about;	Students have the opportunity to ask clarifying and extending questions as they complete the Activities within lessons in the program as well as in the Math Labs sections at the end of each chapter in Bridges, Algebra 1, Geometry, and Algebra 2.			
• appreciate the economy, power, and elegance of mathematical notation and its role in the development of mathematical ideas.	The Math Applications sections at the end of each chapter in Algebra 1, Geometry, and Algebra 2 and in the Cumulative Review sections of Bridges provide for students to gain an appreciation of mathematics as they see mathematics applications in various industrial applications.			

NCTM 9-12 Standard	Bridges Lessons	Algebra 1 Lessons	Geometry Lessons	Algebra 2 Lessons
Standard 3 Mathematics as Reasoning In grades 9-12, the mathematics curriculum should include numerous and varied experiences that reinforce and extend logical reasoning skills so that all students can--				
• make and test conjectures;			2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 3.5	
• formulate counterexamples;			2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 3.5	
• follow logical arguments;			2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 3.5	
• judge the validity of arguments;			2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 3.5	
• construct simple valid arguments;			2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 3.5	
and so that, in addition, college-intending students can--				
• construct proofs for mathematical assertions, including indirect proofs and proofs by mathematical induction.			2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 3.5, 7.5	mathematical induction not covered

NCTM 9-12 Standard	Bridges Lessons	Algebra 1 Lessons	Geometry Lessons	Algebra 2 Lessons
Standard 4 Mathematical Connections In grades 9-12, the mathematics curriculum should include investigation of the connections and interplay among various mathematical topics and their applications so that all students can--				
• recognize equivalent representations of the same concept;	1.4, 1.6, 3.3, 4.1, 4.2, 6.2, 8.2, 9.4, 11.6	1.4, 1.5, 2.2, 3.2, 4.4, 4.5, 6.1, 8.2, 10.2, 10.6, 13.4	3.2, 3.7, 4.2, 4.5, 5.3, 6.5, 8.6, 10.8	2.1, 2.2, 2.4, 4.4, 6.6
• relate procedures in one representation to procedures in an equivalent representation;	1.4, 1.6, 3.3, 4.1, 4.2, 6.2, 8.2, 9.4, 11.6	1.4, 1.5, 2.2, 3.2, 4.4, 4.5, 6.1, 8.2, 10.2, 10.6, 13.4	3.2, 3.7, 4.2, 4.5, 5.3, 6.5, 8.6, 10.8	2.1, 2.2, 2.4, 4.4, 6.6
• use and value the connections among mathematical topics;	As students solve problems in the Math Applications sections at the end of each chapter of Algebra 1, Geometry, and Algebra 2 and in the Cumulative Review sections of Bridges, they make connections among various mathematical topics.			
• use and value the connections between mathematics and other disciplines.	As students solve problems in the Math Applications sections at the end of each chapter of Algebra 1, Geometry, and Algebra 2 and in the Cumulative Review sections of Bridges, they make connections between mathematics and other disciplines.			

NCTM 9-12 Standard	Bridges Lessons	Algebra 1 Lessons	Geometry Lessons	Algebra 2 Lessons
Standard 5 Algebra In grades 9-12, the mathematics curriculum should include the continued study of algebraic concepts and methods so that all students can--				
• represent situations that involve variable quantities with expressions, equations, inequalities, and matrices;	1.3, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 5.7, 5.8, 6.3, 7.5, 8.6, 9.2, 9.4, 9.5, 9.6	1.8, 1.9, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 5.3, 5.4, 5.5, 5.6, 7.3, 8.1, 8.2, 8.3, 8.4, 8.5, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 12.1, 12.2, 12.3, 12.4, 12.5, 13.6	2.6, 3.1, 3.2, 4.1, 4.4, 7.4, 9.1	1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 4.2, 4.3, 4.4, 4.5, 5.1, 5.2, 5.3, 5.4, 5.5, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 9.1, 9.2, 9.3, 9.4, 9.5, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 11.1, 11.2, 11.3, 11.4, 11.5
• use tables and graphs as tools to interpret expressions, equations, and inequalities;	5.7, 5.8, 9.2, 9.4, 9.5	4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 5.3, 5.4, 5.5, 5.6, 7.3, 8.1, 8.2, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 11.1, 12.1, 12.2	7.4	1.5, 1.6, 2.1, 2.3, 2.4, 4.1, 4.2, 4.4, 4.5, 6.1, 7.3, 7.4, 7.5, 7.6, 7.7, 8.1, 8.2, 8.4, 10.1

• operate on expressions and matrices, and solve equations and inequalities;	1.3, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 5.7, 5.8, 6.3	1.8, 1.9, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 8.1, 8.2, 8.3, 8.4, 8.5, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 12.1, 12.2, 12.3, 12.5, 12.4, 13.6	2.6, 3.1, 3.2, 4.1, 4.4, 7.4	1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 4.2, 4.3, 4.4, 4.5, 5.1, 5.2, 5.3, 5.4, 5.5, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 9.1, 9.2, 9.3, 9.4, 9.5, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6
• appreciate the power of mathematical abstraction and symbolism;	1.3, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 5.7, 5.8, 6.3, 9.2, 9.4, 9.5, 9.6	1.8, 1.9, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 5.3, 5.4, 5.5, 5.6, 7.3, 8.1, 8.2, 8.3, 8.4, 8.5, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 12.1, 12.2, 12.3, 12.4, 12.5, 13.6	2.6, 3.1, 3.2, 4.1, 4.4, 7.4, 9.1	1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 4.1, 4.2, 4.3, 4.4, 4.5, 5.1, 5.2, 5.3, 5.4, 5.5, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 9.1, 9.2, 9.3, 9.4, 9.5, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 11.1, 11.2, 11.3, 11.4, 11.5

and so that, in addition, college-intending students can--				
• use matrices to solve linear systems;				3.5
• demonstrate technical facility with algebraic transformations, including techniques based on the theory of equations.		4.6, 4.7	7.4, 7.5	1.4, 1.5, 1.6, 4.5

NCTM 9-12 Standard	Bridges Lessons	Algebra 1 Lessons	Geometry Lessons	Algebra 2 Lessons
Standard 6 Functions				
In grades 9-12, the mathematics curriculum should include the continued study of functions so that all students can--				
• model real-world phenomena with a variety of functions;	9.7	4.5, 4.6, 4.7, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 11.2		4.1, 4.2, 4.3, 4.4, 4.5, 6.1, 8.1, 8.2, 9.1, 10.1, 12.3, 12.4, 13.1
• represent and analyze relationships using tables, verbal rules, equations, and graphs;	9.7	4.5, 4.6, 4.7, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 11.2		4.1, 4.2, 4.3, 4.4, 4.5, 6.1, 8.1, 8.2, 9.1, 10.1, 12.3, 12.4, 13.1
• translate among tabular, symbolic, and graphical representations of functions;	9.7	4.5, 4.6, 4.7, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 11.2		4.1, 4.2, 4.3, 4.4, 4.5, 6.1, 8.1, 8.2, 9.1, 10.1, 12.3, 12.4, 13.1
• recognize that a variety of problem situations can be modeled by the same type of function;	9.7	4.5, 4.6, 4.7, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 11.2		4.1, 4.2, 4.3, 4.4, 4.5, 6.1, 8.1, 8.2, 9.1, 10.1, 12.3, 12.4, 13.1
• analyze the effects of parameter changes on the graphs of functions;	9.7	4.5, 4.6, 4.7, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 11.2		4.5, 6.1, 8.1, 8.2, 9.1, 10.1, 13.1
and so that, in addition, college-intending students can--				
• understand operations on, and the general properties and behavior of, classes of functions.	9.7	4.5, 4.6, 4.7, 5.3, 5.4, 5.5, 5.6, 11.2		4.1, 4.2, 4.3, 4.4, 4.5, 6.1, 8.1, 8.2, 9.1, 10.1, 13.1

NCTM 9-12 Standard	Bridges Lessons	Algebra 1 Lessons	Geometry Lessons	Algebra 2 Lessons
Standard 7 Geometry from a Synthetic Perspective In grades 9-12, the mathematics curriculum should include the continued study of the geometry of two and three dimensions so that all students can--				
• interpret and draw three-dimensional objects;	12.1		10.1, 10.2	
• represent problem situations with geometric models and apply properties of figures;	10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 11.1, 11.2, 11.7, 12.2, 12.3, 12.4, 12.5, 12.6		1.1, 1.2, 1.3, 1.4, 1.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 4.2, 4.3, 4.4, 4.5, 5.2, 5.3, 5.4, 5.5, 5.6, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 9.2, 9.3, 9.4, 9.5, 9.6, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 11.7	
• classify figures in terms of congruence and similarity and apply these relationships;	10.6, 11.1, 11.2, 12.6		3.4, 3.5, 3.6, 3.7, 4.2, 4.3, 4.4, 4.5, 8.1, 8.6, 10.8	

• deduce properties of, and relationships between, figures from given assumptions;	10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 11.1, 11.2, 11.7, 12.2, 12.3, 12.4, 12.5, 12.6		1.1, 1.2, 1.3, 1.4, 1.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 4.2, 4.3, 4.4, 4.5, 5.2, 5.3, 5.4, 5.5, 5.6, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 9.2, 9.3, 9.4, 9.5, 9.6, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 11.7	
and so that, in addition, college-intending students can--				
• develop an understanding of an axiomatic system through investigating and comparing various geometries.			Various geometries are discussed in the Cultural Connections featured throughout this textbook.	

NCTM 9-12 Standard	Bridges Lessons	Algebra 1 Lessons	Geometry Lessons	Algebra 2 Lessons
Standard 8 Geometry from an Algebraic Perspective In grades 9-12, the mathematics curriculum should include the study of the geometry of two and three dimensions from an algebraic point of view so that all students can-				
• translate between synthetic and coordinate representations;			7.1, 7.2, 7.3, 7.4, 7.5, 7.6	
• deduce properties of figures using transformations and using coordinates;	10.7, 10.8, 10.9		11.1, 11.2, 11.3, 11.4, 11.5	
• identify congruent and similar figures using transformations;	10.7, 10.8, 10.9		11.1, 11.2, 11.3, 11.4, 11.5	
• analyze properties of Euclidean transformations and relate translations to vectors;	10.7, 10.8, 10.9		11.1, 11.2, 11.3, 11.4, 11.5	
and so that, in addition, college-intending students can-				
• deduce properties of figures using vectors;			7.2, 11.2, 11.4, 11.5	
• apply transformations, coordinates, and vectors in problem solving.	10.7, 10.8, 10.9		7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 11.1, 11.2, 11.3, 11.4, 11.5	

NCTM 9-12 Standard	Bridges Lessons	Algebra 1 Lessons	Geometry Lessons	Algebra 2 Lessons
Standard 9 Trigonometry In grades 9-12, the mathematics curriculum should include the study of trigonometry so that all students can--				
• apply trigonometry to problem situations involving triangles;		13.5	5.4, 5.5, 5.6	12.1, 12.3, 12.4, 12.5, 12.6
• explore periodic real-world phenomena using the sine and cosine functions;		13.5	5.5, 5.6	12.1, 12.3, 12.4, 12.5, 12.6
and so that, in addition, college-intending students can--				
• understand the connection between trigonometric and circular functions;				12.3
• use circular functions to model periodic real-world phenomena;				12.3
• apply general graphing techniques to trigonometric functions;				13.1
• solve trigonometric equations and verify trigonometric identities;				13.2, 13.3, 13.4, 13.5
• understand the connections between trigonometric functions and polar coordinates, complex numbers, and series.				not covered

NCTM 9-12 Standard	Bridges Lessons	Algebra 1 Lessons	Geometry Lessons	Algebra 2 Lessons
Standard 10 Statistics In grades 9-12, the mathematics curriculum should include the continued study of data analysis and statistics so that all students can--				
• construct and draw inferences from charts, tables, and graphs that summarize data from real-world situations;	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7	7.1, 7.2, 7.3, 7.4, 7.5, 7.6		Chapter 1 Math Labs
• use curve fitting to predict from data;		7.3 (linear)		1.6 (linear)
• understand and apply measures of central tendency, variability, and correlation;	2.1, 2.2, 2.3, 2.4, 2.7	7.1, 7.2, 7.3, 7.4, 7.5, 7.6		
• understand sampling and recognize its role in statistical claims;	6.4	6.6		
• design a statistical experiment to study a problem, conduct the experiment, and interpret and communicate the outcomes;	Chapter 2 Math Labs	Chapter 7 Math Labs		
• analyze the effects of data transformations on measures of central tendency and variability;	2.4, 2.6, 2.7	7.1, 7.5, 7.6		
and so that, in addition, college-intending students can--				
• transform data to aid in data interpretation and prediction;	2.2, 2.3, 2.4, 2.5, 2.6	7.3, 7.5, 7.6		
• test hypotheses using appropriate statistics.		not covered		not covered

NCTM 9-12 Standard	Bridges Lessons	Algebra 1 Lessons	Geometry Lessons	Algebra 2 Lessons
Standard 11 Probability In grades 9-12, the mathematics curriculum should include the continued study of probability so that all students can--				
• use experimental or theoretical probability, as appropriate, to represent and solve problems involving uncertainty;	6.5, 6.6, 6.7, 6.8	6.1, 6.2, 6.3, 6.4, 6.5	8.7	14.1, 14.2, 14.3, 14.4
• use simulations to estimate probabilities;	6.8	6.2		
• understand the concept of a random variable;				not covered
• create and interpret discrete probability distributions;				not covered
• describe, in general terms, the normal curve and use its properties to answer questions about sets of data that are assumed to be normally distributed;		7.6		
and so that, in addition, college-intending students can--				
• apply the concept of a random variable to generate and interpret probability distributions including binomial, uniform, normal, and chi square.				11.5 (#31) covers Binomial Theorem

NCTM 9-12 Standard	Bridges Lessons	Algebra 1 Lessons	Geometry Lessons	Algebra 2 Lessons
Standard 12 Discrete Mathematics In grades 9-12, the mathematics curriculum should include topics from discrete mathematics so that all students can--				
• represent problem situations using discrete structures such as finite graphs, matrices, sequences, and recurrence relations;		1.6		3.1, 3.2, 3.3, 3.4, 3.5, Chapter 3 Math Labs, 11.1, 11.2, 11.3, 11.4, 11.5
• represent and analyze finite graphs using matrices;		1.6		3.3, 3.4, Chapter 3 Math Labs
• develop and analyze algorithms;				3.1, 3.2, 3.3, 3.4, 3.5, 11.1, 11.2, 11.3, 11.4, 11.5, 14.1, 14.2, 14.3, 14.4
• solve enumeration and finite probability problems;				14.1, 14.2, 14.3, 14.4
and so that, in addition, college-intending students can--				
• represent and solve problems using linear programming and difference equations;				2.4, 3.5
• investigate problem situations that arise in connection with computer validation and the application of algorithms.				not covered

NCTM 9-12 Standard	Bridges Lessons	Algebra 1 Lessons	Geometry Lessons	Algebra 2 Lessons
Standard 13 Conceptual Underpinnings of the Calculus In grades 9-12, the mathematics curriculum should include the informal exploration of calculus concepts from both a graphical and a numerical perspective so that all students can--				
• determine maximum and minimum points of a graph and interpret the results in problem situations;		11.2		6.1
• investigate limiting processes by examining infinite sequences and series and areas under curves;				11.4
and so that, in addition, college-intending students can--				
• understand the conceptual foundations of limit, the area under a curve, the rate of change, and the slope of a tangent line, and their applications in other disciplines;		rate of change – 4.2		rate of change – 1.4
• analyze the graphs of polynomial, rational, radical, and transcendental functions.		square root function – 5.5		4.4, 9.1, 10.1

NCTM 9-12 Standard	Bridges Lessons	Algebra 1 Lessons	Geometry Lessons	Algebra 2 Lessons
Standard 14 Mathematical Structure In grades 9-12, the mathematics curriculum should include the study of mathematical structure so that all students can--				
• compare and contrast the real number system and its various subsystems with regard to their structural characteristics;	8.5	1.1, 13.3		1.1
• understand the logic of algebraic procedures;	4.1, 4.2, 4.3	3.1, 3.3, 10.3	2.6	1.2, 5.1, 8.3
• appreciate that seemingly different mathematical systems may be essentially the same;	The Cultural Connections features throughout the textbooks provide for students to learn about various mathematical systems and how each compares to our current system.			
and so that, in addition, college-intending students can--				
• develop the complex number system and demonstrate facility with its operations;				5.5
• prove elementary theorems within various mathematical structures, such as groups and fields;				not covered
• develop an understanding of the nature and purpose of axiomatic systems.	4.1, 4.2	3.1, 3.3	Chapter 2 presents an axiomatic system in terms of geometry	1.2, 5.1, 8.3