Cord Algebra 2, Learning in Context, 3rd edition
correlation to Washington State Algebra II Core Content

	Algebra 2 Lesson(s)
A2.1. Core Content: *Solving problems*	
A2.1.A Select and justify functions and equations to model and solve problems.	1.2, 1.3, 1.4, 1.5, 1.6, Chapter 1 Math Applications, 4.1, 4.2, 4.3, 4.4, 4.5, Chapter 4 Math Applications, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, Chapter 6 Math Applications, 8.1, 8.2, 8.5, 9.5, 10.4, 12.4
A2.1.B Solve problems that can be represented by systems of equations and inequalities.	2.1, 2.2, 2.3, 2.4, 2.5, Chapter 2 Math Applications
A2.1.C Solve problems that can be represented by quadratic functions, equations, and inequalities.	6.1, 6.2, 6.3, 6.4, 6.5, 6.6, Chapter 6 Math Applications
A2.1.D Solve problems that can be represented by exponential and logarithmic functions and equations.	8.1, 8.2, 8.3, 8.4, 8.5, 8.6, Chapter 8 Math Applications
A2.1.E Solve problems that can be represented by inverse variations of the forms $f(x) = \frac{a}{x} + b$, $f(x) = \frac{a}{x^2} + b$, and $f(x) = \frac{a}{(bx + c)}$.	10.6
A2.1.F Solve problems involving combinations and permutations.	14.3, 14.4
A2.2. Core Content: *Numbers, expressions, and operations*	
A2.2.A Explain how whole, integer, rational, real, and complex numbers are related, and identify the number systems(s) within which a given algebraic equation can be solved.	1.1, 5.5
A2.2.B Use the laws of exponents to simplify and evaluate numeric and algebraic expressions that contain rational exponents.	5.3, 10.2, 10.3
A2.2.C Add, subtract, multiply, divide, and simplify rational and more general algebraic expressions.	10.2, 10.3

Correlation completed 10/03/08 by MATHQueue, Inc.

A2.3. Core Content: *Quadratic functions and equations*	
A2.3.A Translate between the standard form of a quadratic function, the vertex form, and the factored form; graph and interpret the meaning of each form.	6.1, 7.3
A2.3.B Determine the number and nature of the roots of a quadratic function.	6.5
A2.3.C Solve quadratic equations and inequalities, including equations with complex roots.	6.1, 6.2, 6.3, 6.4, 6.5, 6.6
A2.4. Core Content: *Exponential and logarithmic functions and equations*	
A2.4.A Know and use basic properties of exponential and logarithmic functions and the inverse relationship between them.	8.1, 8.2, 8.3, 8.4, 8.5
A2.4.B Graph an exponential function of the form $f(x) = ab^x$ and its inverse logarithmic function.	8.1, 8.2
A2.4.C Solve exponential and logarithmic equations.	8.5
A2.5. Core Content: *Additional functions and equations*	
A2.5.A Construct new functions using the transformations $f(x - h)$, $f(x) + k$, $cf(x)$, and by adding and subtracting functions, and describe the effect on the original graph(s).	4.2, 4.5
A2.5.B Plot points, sketch, and describe the graphs of functions of the form $f(x) = a\sqrt{x-c} + d$, and solve related equations.	4.5
A2.5.C Plot points, sketch, and describe the graphs of functions of the form $f(x) = \frac{a}{x} + b$, $f(x) = \frac{a}{x^2} + b$, and $f(x) = \frac{a}{(bx+c)}$, and solve related equations.	10.1
A2.5.D Plot points, sketch, and describe the graphs of cubic polynomial functions of the form $f(x) = ax^3 + d$ as an example of higher order polynomials and solve related equations.	not covered

A2.6. Probability, data, and distributions	
A2.6.A Apply the fundamental counting principle and the ideas of order and replacement to calculate probabilities in situations arising from two-stage experiments (compound events).	14.1, 14.2
A2.6.B Given a finite sample space consisting of equally likely outcomes and containing events A and B, determine whether A and B are independent or dependent, and find the conditional probability of A given B.	14.1, 14.2
A2.6.C Compute permutations and combinations, and use the results to calculate probabilities.	14.3, 14.4
A2.6. D Apply the binomial theorem to solve problems involving probability.	not covered
A2.6.E Determine if a bivariate data set can be better modeled with an exponential or a quadratic function and use model to make predictions.	not covered
A2.6.F Calculate and interpret measure of variability and standard deviation and use these measures and the characteristics of the normal distribution to describe and compare data sets.	Covered in *Cord Algebra 1*
A2.6.G Calculate and interpret margin of error and confidence intervals for population proportions.	not covered
A2.7. Additional Key Content	
A2.7.A Solve systems of three equations with three variables.	2.5
A2.7.B Find the terms and partial sums of arithmetic and geometric series and the infinite sum for geometric series.	11.2, 11.3, 11.4

A2.8. Core Processes: Reasoning, problem solving, and communication	
A2.8.A Analyze a problem situation and represent it mathematically.	covered throughout the textbook
A2.8.B Select and apply strategies to solve problems.	covered throughout the textbook, especially in Math Applications feature (every chapter)
A2.8.C Evaluate a solution for reasonableness, verify its accuracy, and interpret the solution in the context of the original problem.	covered throughout the textbook, especially in Math Applications feature (every chapter)
A2.8.D Generalize a solution strategy for a single problem to a class of related problems and apply a strategy for a class of related problems to solve specific problems.	covered throughout the textbook, especially in Math Applications feature (every chapter)
A2.8.E Read and interpret diagrams, graphs, and text containing the symbols, language, and conventions of mathematics.	covered throughout the textbook, especially in Math Applications feature (every chapter)
A2.8.F Summarize mathematical ideas with precision and efficiency for a given audience and purpose**.**	covered throughout the textbook, especially in Math Applications feature (every chapter)
A2.8.G Use inductive reasoning and the properties of numbers to make conjectures, and use deductive reasoning to prove or disprove conjectures.	covered throughout the textbook, especially in Activities and Math Labs (every chapter)
A2.8.H Synthesize information to draw conclusions and evaluate the arguments and conclusions of others.	covered throughout the textbook, especially in Activities and Math Labs (every chapter)