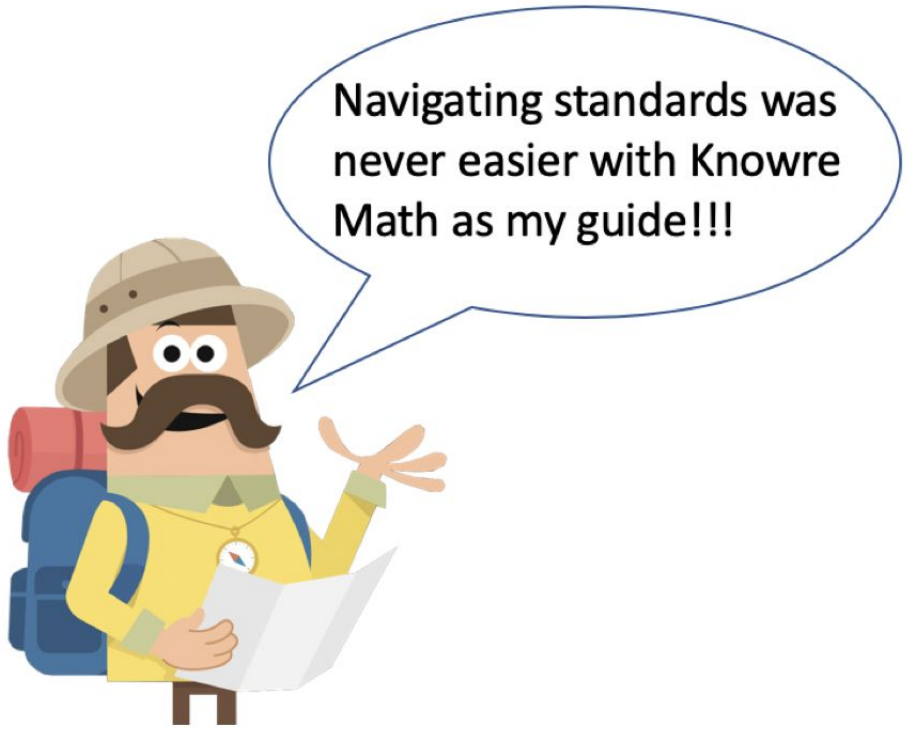
Knowre Math, an adaptive, digital core supplement is aligned to the Common Core Standards for Mathematics and provides extensive coverage of the skills and courses that students are required to master.
The targeted standards for different grade levels are integrated into all chapters/courses/applications to bring educational equity to all students in the classroom or at home.



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Algebra 2 ~ Common Core State Standards: Mathematics		Knowre Algebra 2 Lessons
N.CN.1	Know there is a complex number i such that i^2=–1, and every complex number has the form a+bi with a and b real.	Lessons 7-5, 7-6
N.CN.2	Use the relation i^2 = -1 and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.	Lessons 7-5, 7-6, 8-4
N.CN.7	Solve quadratic equations with real coefficients that have complex solutions.	Lessons 8-5, 8-6
N.CN.8	Extend polynomial identities to the complex numbers.	Lesson 7-6
N.CN.9	Know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials.	Lessons 9-3, 9-4
A.SSE.1.a	Interpret parts of an expression, such as terms, factors, and coefficients.	Lessons 1-2, 5-4, 6-2, 6-3, 6-4, 6-5, 6-6, 7-1, 7-2, 7-3, 7-4, 7-6, 8-2, 8-5, 9-1, 9-2, 9-4, 11-3, 12-2, 12-3, 12-5, 12-6, 13-3
A.SSE.1.b	Interpret complicated expressions by viewing one or more of their parts as a single entity.	Lessons 7-6, 11-3, 11-6, 12-2, 12-3, 12-5, 13-5
A.SSE.2	Use the structure of an expression to identify ways to rewrite it.	Lessons 9-3, 9-4
A.SSE.4	Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems.	Lessons 12-5, 12-6
A.APR.1	Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.	Lesson 7-2
A.APR.2	Know and apply the Remainder Theorem: For a polynomial p(x) and a number a, the remainder on division by x - a is p(a), so p(a) = 0 if and only if (x - a) is a factor of p(x).	Lesson 9-3
A.APR.3	Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.	Lessons 8-4, 9-3, 9-4

A.APR.4	Prove polynomial identities and use them to describe numerical relationships.	Lessons 7-1, 7-2, 7-4, 8-5
A.APR.5	Know and apply the Binomial Theorem for the expansion of (x + y)^n in powers of x and y for a positive integer n, where x and y are any numbers, with coefficients determined for example by Pascal's Triangle.	Not covered
A.APR.6	Rewrite simple rational expressions in different forms; write a(x)/b(x) in the form q(x) + r(x)/b(x), where a(x), b(x), q(x), and r(x) are polynomials with the degree of r(x) less than the degree of b(x), using inspection, long division, or, for the more complicated examples, a computer algebra system.	Lessons 9-1, 9-2, 9-3, 13-1, 13-4
A.APR.7	Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions.	Lessons 13-1, 13-2, 13-3
A.CED.1	Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.	Lessons 8-1, 8-4, 8-5, 8-6, 10-2
A.CED.2	Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.	Lesson 8-4
A.CED.3	Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context.	Lessons 1-4, 1-5, 2-3, 3-6, 4-4, 4-5, 8-1, 8-3, 9-3, 12-2, 12-3
A.CED.4	Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.	Lessons 1-3, 3-1, 3-3, 3-4, 8-5, 9-2, 10-2, 11-2, 11-4
A.REI.2	Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.	Lesson 8-3, 8-4, 8-5, 8-6, 10-2
		Lesson 10-2
		Lesson 10-2
		Lesson 13-6
		Lesson 10-2

A.REI.11	Explain why the x-coordinates of the points where the graphs of the equations y = f(x) and y = g(x) intersect are the solutions of the equation f(x) = g(x); find the solutions approximately. Include cases where f(x) and/or g(x) are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.	Not covered
F.IF.4	For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.	Lessons 3-1, 3-2, 3-3, 3-4, 3-5, 6-1, 6-2, 8-1, 8-2, 8-3, 8-4, 8-5, 9-4, 11-1, 11-5, 11-6, 13-4, 13-5
F.IF.5	Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.	Lesson 13-4, 13-5
F.IF.6	Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.	Lessons 3-2, 3-3, 3-4, 3-5, 12-1, 13-7
F.IF.7.b	Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.	Lessons 10-1, 11-1, 11-5, 13-4
F.IF.7.c	Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior.	Lesson 9-4
F.IF.7.e	Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.	Lesson 11-1, 11-5, 11-6
F.IF.8.a	Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.	Lessons 8-4, 8-5
F.IF.8.b	Use the properties of exponents to interpret expressions for exponential functions.	Lessons 11-1, 11-6
F.IF.9	Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).	Lessons 3-2, 3-4, 8-2
F.BF.1.b	Combine standard function types using arithmetic operations. For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.	Lessons 10-3, 13-3

F.BF.3	Identify the effect on the graph of replacing f(x) by f(x) + k, k f(x), f(kx), and f(x + k) for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them.	Lessons 6-2, 6-3, 6-4, 6-5, 6-6
F.BF.4.a	Solve an equation of the form f(x) = c for a simple function f that has an inverse and write an expression for the inverse.	Lessons 10-5, 11-5
F.LE.4	For exponential models, express as a logarithm the solution to ab^(ct)=d where a, c, and d are numbers and the base b is 2, 10, or e; evaluate the logarithm using technology.	Lessons 11-3, 11-4, 11-5
F.TF.1	Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle.	Not covered
F.TF.2	Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle.	Not covered
F.TF.5	Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.	Not covered
F.TF.8	Prove the Pythagorean identity sin^2(θ) + cos^2(θ) = 1 and use it to find sin(θ), cos(θ), or tan(θ) given sin(θ), cos(θ), or tan(θ) and the quadrant of the angle.	Not covered
S.ID.4	Use the mean and standard deviation of a data set to fit it to a normal distribution 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.	Not covered
S.IC.1	Understand statistics as a process for making inferences about population parameters based on a random sample from that population.	Not covered
S.IC.2	Decide if a specified model is consistent with results from a given data-generating process.	Not covered
S.IC.3	Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each.	Not covered
S.IC.4	Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.	Not covered
S.IC.5	Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant.	Not covered
S.IC.6	Evaluate reports based on data.	Not covered

S.MD.6	Use probabilities to make fair decisions.	Not covered
S.MD.7	Analyze decisions and strategies using probability concepts.	Not covered