Math

Algebra 2

Not feeling ready for this? Check out Get ready for Algebra 2.

12,700 / 12,700 (100%)
Mastery points

Course summary

Polynomial arithmetic

Mastery challenge

Strengthen skills you've already practiced in just 6 questions.

Get started

Polynomial arithmetic

1200/1200 Mastery points

- Intro to polynomials
- Average rate of change of polynomials
- Adding and subtracting polynomials
- Multiplying monomials by polynomials
- Multiplying binomials by polynomials
- Special products of polynomials

Complex numbers

900/900 Mastery points

- The imaginary unit i
- Complex numbers introduction
- The complex plane
- Adding and subtracting complex numbers
- Multiplying complex numbers
- Quadratic equations with complex solutions

Polynomial factorization

1000/1000 Mastery points

- Factoring monomials
- Greatest common factor
- Taking common factors
- Factoring higher degree polynomials
- Factoring using structure
- Polynomial identities
- Geometric series

Polynomial division

800/800 Mastery points

- Dividing polynomials by x
- Dividing quadratics by linear factors
- Dividing polynomials by linear factors
- Polynomial Remainder Theorem

Polynomial graphs

500/500 Mastery points

- Zeros of polynomials
- Positive and negative intervals of polynomials
- End behavior of polynomials
- Putting it all together

Rational exponents and radicals

1000/1000 Mastery points

- Rational exponents
- Properties of exponents (rational exponents)
- Evaluating exponents & radicals
- Equivalent forms of exponential expressions
- Solving exponential equations using properties of exponents

Exponential models

500/500 Mastery points

- Interpreting the rate of change of exponential models
- Constructing exponential models according to rate of change
- Advanced interpretation of exponential models

Logarithms

900/900 Mastery points

- Introduction to logarithms
- The constant e and the natural logarithm
- Properties of logarithms
- The change of base formula for logarithms
- Solving exponential equations with logarithms
- Solving exponential models

Transformations of functions

1000/1000 Mastery points

- Shifting functions
- Reflecting functions
- Symmetry of functions
- Scaling functions
- Putting it all together
- Graphs of square and cube root functions
- Graphs of exponential functions
- Graphs of logarithmic functions

Equations

1000/1000 Mastery points

- Rational equations
- Square-root equations
- Extraneous solutions
- Cube-root equations
- Quadratic systems
- Solving equations by graphing

Trigonometry

1700/1700 Mastery points

- Unit circle introduction
- Radians
- The Pythagorean identity
- Trigonometric values of special angles
- Graphs of sin(x), cos(x), and tan(x)
- Amplitude, midline and period
- Transforming sinusoidal graphs
- Graphing sinusoidal functions
- Sinusoidal models

Modeling

800/800 Mastery points

- Modeling with function combination
- Interpreting features of functions
- Manipulating formulas
- Modeling with two variables
- Modeling with multiple variables

Rational functions

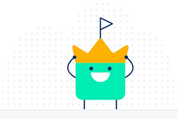
1400/1400 Mastery points

- Cancelling common factors
- End behavior of rational functions
- Discontinuities of rational functions
- Graphs of rational functions
- Modeling with rational functions
- Multiplying and dividing rational expressions
- Adding and subtracting rational expressions intro
- Adding and subtracting rational expressions (factored)
- Adding and subtracting rational expressions (not factored)

Course challenge: 100% 2 months ago

Amazing work! Looks like you really know your stuff!

Take Course challenge again



Community questions