Math
Algebra 1

Not feeling ready for this? Check out Get ready for Algebra 1.

18,100 / 18,100 (100%)
Mastery points

Course summary

Mastery challenge

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

Get started

Algebra foundations
700/700 Mastery points

- Overview and history of algebra
- Introduction to variables
- Substitution and evaluating expressions
- Combining like terms
- Introduction to equivalent expressions
- Division by zero

Solving equations & inequalities
1100/1100 Mastery points

- Linear equations with variables on both sides
- Linear equations with parentheses
- Analyzing the number of solutions to linear equations
- Linear equations with unknown coefficients
- Multi-step inequalities
- Compound inequalities

Working with units
400/400 Mastery points

- Rate conversion
- Appropriate units
- Word problems with multiple units

Linear equations & graphs
1500/1500 Mastery points

- Two-variable linear equations intro
- Slope
- Horizontal & vertical lines
- x-intercepts and y-intercepts
- Applying intercepts and slope

Forms of linear equations
1100/1100 Mastery points

- Intro to slope-intercept form
- Graphing slope-intercept equations
- Writing slope-intercept equations
- Point-slope form
- Standard form
- Summary: Forms of two-variable linear equations

Systems of equations
1500/1500 Mastery points

- Introduction to systems of equations
- Solving systems of equations with substitution
- Solving systems of equations with elimination
- Equivalent systems of equations
- Number of solutions to systems of equations
- Systems of equations word problems

Inequalities (systems & graphs)
800/800 Mastery points

- Checking solutions of two-variable inequalities
- Graphing two-variable inequalities
- Modeling with linear inequalities

Functions
2200/2200 Mastery points

- Evaluating functions
- Inputs and outputs of a function
- Functions and equations
- Interpreting function notation
- Introduction to the domain and range of a function
- Determining the domain of a function
- Recognizing functions
- Maximum and minimum points
- Intervals where a function is positive, negative, increasing, or...
- Interpreting features of graphs
- Average rate of change
- Average rate of change word problems
- Intro to inverse functions

Sequences
1400/1400 Mastery points

- Introduction to arithmetic sequences
- Constructing arithmetic sequences
- Introduction to geometric sequences
- Constructing geometric sequences
- Modeling with sequences
- General sequences

Absolute value & piecewise functions
600/600 Mastery points

- Graphs of absolute value functions
- Piecewise functions

Exponents & radicals
900/900 Mastery points

- Exponent properties review
- Radicals
- Simplifying square roots

Exponential growth & decay
1300/1300 Mastery points

- Exponential vs. linear growth
- Exponential expressions
- Graphs of exponential growth
- Exponential vs. linear growth over time
- Exponential growth & decay
- Exponential functions from tables & graphs
- Exponential vs. linear models

Quadratics: Multiplying & factoring
1500/1500 Mastery points

- Multiplying monomials by polynomials
- Multiplying binomials
- Special products of binomials
- Introduction to factoring
- Factoring quadratics intro
- Factoring quadratics by grouping
- Factoring quadratics with difference of squares
- Factoring quadratics with perfect squares
- Strategy in factoring quadratics

Quadratic functions & equations
3100/3100 Mastery points

- Intro to parabolas
- Solving and graphing with factored form
- Solving by taking the square root
- Vertex form
- Solving quadratics by factoring
- The quadratic formula
- Completing the square
- Strategizing to solve quadratic equations
- Quadratic standard form
- Features & forms of quadratic functions
- Comparing quadratic functions
- Transforming quadratic functions

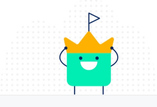
Irrational numbers
Mastery unavailable

- Irrational numbers
- Sums and products of rational and irrational numbers
- Proofs concerning irrational numbers

Course challenge: 100% 3 months ago

Amazing work! Looks like you really know your stuff!

Take Course challenge again



Community questions