

Algebra Topics & Resources

Updated January 2020



Key Topics

Key Topics Covered in Algebra

- → Graphing
 - ◆ Cartesian coordinate system
 - ◆ Slope & slope-intercept form
 - ◆ Common graphs
- → Linear Equations
 - ◆ One-step equations
 - ◆ Multi-step equations
- → Systems of Equations
 - Substitution method
 - Elimination method
- → Inequalities
 - Graphing inequalities
 - Solving inequalities
- → Functions
 - Graphing functions
 - Operations on functions
 - ◆ Inverse functions

- → Absolute Value & Piecewise Functions
- → Exponents & Exponential Functions
 - ◆ Exponential growth & decay
 - ◆ Logarithms
- → Polynomials
 - Arithmetic with polynomials
 - Factoring polynomials
- → Quadratic Equations
 - Factoring quadratics
 - Parabolas
 - Quadratic formula
- → Complex Numbers
 - Arithmetic with complex numbers
 - Complex conjugates



Algebra

Additional Resources

- → https://www.khanacademy.org/math/algebra
- → https://www.khanacademy.org/math/algebra2
- → https://www.sparknotes.com/math/
- → https://www.mathplanet.com/education/algebra-1
- → http://web.mit.edu/jorloff/www/18.01a-esg/OCWAlgebra.pdf
- http://www.wallace.ccfaculty.org/book/Beginning and Intermediate Algebra.pdf

