

Online Tutorials for Algebra I Keystone Exams:

Module 1: Operations and Linear Equations and Inequalities:

Operations with Real Numbers and Expressions

A1.1.1 <http://www.khanacademy.org/math/arithmetric/order-of-operations>

<http://www.khanacademy.org/math/arithmetric/basic-exponents>

<http://www.khanacademy.org/math/algebra/exponents-radicals>

(Focus on the following video: Simplifying Square Roots)

<http://www.khanacademy.org/math/algebra/polynomials>

(Focus on the following videos: Monomial Greatest Common Factor, Factoring Trinomials with a leading 1 coefficient, Factoring Trinomials with a common factor, Factoring Trinomials with a non-1 leading coefficient, Factoring Difference of Squares, Addition and Subtraction of Polynomials, Multiplying Polynomials)

<http://www.khanacademy.org/math/arithmetric/factors-multiples>

(Focus on the following videos: Least Common Multiple, Algebraic Expression Least Common Multiple)

<http://www.khanacademy.org/math/algebra/quadtratics>

(Focus on the following videos: factoring methods)

Linear Equations

A1.1.2 <http://www.khanacademy.org/math/algebra/systems-of-eq-and-ineq>

(Focus on the following videos: Solving Systems Graphically, Systems with Elimination Practice, Practice using Substitution for Systems, Special Types of Linear Systems)

<http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities>

(Focus on the following videos: Multistep Equations, Absolute Value Equations)

Linear Inequalities

A1.1.3 <http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities>

(Focus on the following videos: Multistep Inequalities, Compound Inequalities, Absolute Value Equations Inequalities)

<http://www.khanacademy.org/math/algebra/systems-of-eg-and-ineq>

(Focus on the following videos: Graphing Systems of Inequalities 1, 2, 3, Testing Solutions for a System of Inequalities)

Module 2: Linear Functions and Data Organizations

Functions

A1.2.1 <http://www.khanacademy.org/math/algebra/systems-of-eg-and-ineq>

(Focus on the following video: Patterns and Equations)

<http://www.khanacademy.org/math/algebra/algebra-functions>

(Focus on the following videos: (Relations and Functions, Domain of a function, Domain and Range of a Relation, Domain and Range of a Function Given a Formula)

Coordinate Geometry

A1.2.2 <http://www.khanacademy.org/math/algebra/linear-equations-and-inequalitie>

(Focus on the following videos: Slope of a Line, Slope and Rate of Change, Graphing using Intercepts, Graphs using Slope-intercept form, Linear Equations in Slope-intercept form, Linear Equations in Point Slope form, Linear equations in Standard form, Parallel lines, Perpendicular lines, Fitting a line to data)

Data Analysis

A1.2.3 <http://www.khanacademy.org/math/statistics>

(Focus on the following videos: Reading Bar Graphs, Mean, Median, and Mode, Reading Pie Graphs, Misleading Line Graphs, Stem and Leaf Plots, Box and Whisker Plots, Reading Box and Whisker Plots)

<http://www.khanacademy.org/math/probability>

(Focus on the following videos: Basic Probability, Simple Probability, Probability with Playing Cards and Venn Diagrams, Compound Probability of Independent Events, Probability of Dependent Events, Probability 1 Module Examples)