Chapter 0 Preparing for Algebra

0.2 Square Roots & Perfect Squares
http://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-numbers-operations/cc-8th-roots/v/understanding-square-roots

Evaluating Radical expressions
http://www.youtube.com/watch?feature=player_embedded&v=VDggckCnl3w

0.3 Absolute Value
http://www.youtube.com/watch?v=NvGTCzAfvr0

0.3 Adding and Subtracting Real Number
http://www.youtube.com/watch?v=jvad-axh3ww

0.3 Multiplying and Dividing Real Numbers
http://www.youtube.com/watch?v=WePL7EUluXw

Chapter 1 Expressions, Equations and Functions

1.1 Variables in Algebra
http://www.brightstorm.com/math/algebra/pre-algebra/defining-variables/

1.1 Translating Words into Mathematical Symbols
http://www.lemars.k12.ia.us/webfiles/mboyd/Algebra%201A%20%26%201B%20Textbook%20(e-edition)/Source/CAP01FAD.pdf
http://www.youtube.com/watch?v=HK10zRUTRhy

1.1 Exponents and Powers
http://www.youtube.com/watch?v=wCFSy_JKz3g
http://vimeo.com/86415590
1.1 Translating Words into Mathematical Symbols

http://www.lemars.k12.ia.us/webfiles/mboyd/Algebra%201A%20&%201B%20Textbook%20(e-edition)/Source/CAP01FAD.pdf

http://www.youtube.com/watch?v=HK10zRUTRhY

1.2 Order of Operations

http://www.youtube.com/watch?v=dAgfnK528RA

http://www.brightstorm.com/math/algebra/pre-algebra/order-of-operations/

http://www.youtube.com/watch?v=3Mu3ciXkemg

http://www.youtube.com/watch?v=AoAiItPsGwM

http://www.youtube.com/watch?v=Y3CZ_JBQ0do

1.4 Distributive Property and Combining Like Terms

http://www.youtube.com/watch?v=4bD8DOXBOeo

http://www.youtube.com/watch?v=STfLyYhDhwk

1.5 and 5.1 Equations and Inequalities


1.6 The Coordinate Plane

http://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-geometry-topic/cc-6th-coordinate-plane/v/the-coordinate-plane
1.6 and 1.7 Tables and Graphs

http://www.wikihow.com/Make-Bar-Graphs

http://www.youtube.com/watch?v=cxObY5VaorU


1.6 Domain, Range and Relation

http://www.youtube.com/watch?v=7Hg9JJceywA

1.7 An Introduction to Function

http://www.youtube.com/watch?v=vO5qqfsWzhc


1.7 Vertical Line Test

http://www.youtube.com/watch?v=96VqHrvZdXw

1.7 Evaluate a Function

http://www.youtube.com/watch?v=YA9qEHnsdvQ

Chapter 2 Solving Linear Equations

2.2 Solving Equations Using Addition and Subtraction


2.2 Solving Equations Using Multiplication and Division

https://www.youtube.com/watch?v=zBqIiH-E3ero

Multiply by the Reciprocal

http://www.youtube.com/watch?v=UkVmmNp8iiU
2.3 Solving Multi-Step Equations
http://www.youtube.com/watch?v=wShnYemIr28
http://www.youtube.com/watch?v=X7RVhbvl6kE
http://www.bing.com/videos/search?q=solving+multi+step+equations+khan+academy&view=detail&mid=98297B0FA078BA5749A29829780FA078BA5749A2&FORM=VRDGAR

2.4 Solving Equations with Variables on Both Side
https://www.youtube.com/watch?v=a5uNoOnEy_A
http://www.youtube.com/watch?v=wShnYemIr28

2.4 Identify the Number of Solutions
http://www.youtube.com/watch?v=lMmzCtnSIo0

2.4 More Linear Equations
http://www.youtube.com/watch?v=xdDE2Z6WwnU

2.4 Solving Decimal Equations
http://www.youtube.com/watch?v=dZUXBCVCgWE

2.5 Solving Absolute-Value Inequalities
http://www.youtube.com/watch?v=q1oirdfTAM

Chapter 3 Graphing Linear Equations

3.1 Graphing Linear Equations
3.1 Graphing Horizontal and Vertical Lines
https://www.youtube.com/watch?v=KwBE2pJDWvU

3.1 Graphing Lines Using Intercepts
http://www.youtube.com/watch?v=5avYfw7DRo8

3.3 The Slope of a Line

http://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-relationships-functions/cc-8th-slope/e/slope_of_a_line

Chapter 4 Graphing and Writing Linear Equations

4.1 Graphing Lines Using Slope-Intercept Form


4.2 Writing Equations in Slope-Intercept Form
http://www.youtube.com/watch?v=pyAFnb4QQNk

4.2 and 4.3 Writing Linear Equations Given Two Points
http://www.youtube.com/watch?v=4il4haYASys

4.3 Writing Equations in Point-Slope Form
http://www.youtube.com/watch?v=aQhb84bZDzw

4.3 Writing in Equations in Standard Form
http://www.bing.com/videos/search?q=writing+equations+in+standard+form&&view=detail&mid=5B088F0F2CB97EJB631A5B088F0F2CB97EJB631A&FORM=VRDGAR
4.3 Modeling with Linear Equations

http://www.youtube.com/watch?v=bca5tGJmvr8
http://www.youtube.com/watch?v=jsjgc2YGpEl

Chapter 5 Solving and Graphing Linear Inequalities

5.1 Solving Inequalities Using Addition or Subtraction

http://www.youtube.com/watch?v=dmQ8lW0lAv0

5.2 Solving Inequalities Using Multiplication or Division

http://www.youtube.com/watch?v=I6Njd2XWF5E

5.3 Solving Multi-Step Inequalities

http://www.youtube.com/watch?v=UDORaoQ-2pQ

5.4 and 5.5 Solving Compound Inequalities Involving "And" and "Or"

http://www.youtube.com/watch?v=aHZIk3W3EzM&spfreload=1

5.5 Solving Absolute-Value Inequalities

http://www.youtube.com/watch?v=q1oirdfTAM

5.6 Graphing Linear Inequalities in Two Variables

http://www.youtube.com/watch?v=Hzxc4HASyglU

Chapter 6 Linear Systems

6.1 Solving Linear Systems Graphically

http://www.youtube.com/watch?v=cuNpXve18Pc

6.2 Solving Linear Systems Using Substitution

http://www.youtube.com/watch?v=mDw2F2zyThs
6.2 Special Types of Linear Systems

6.3 and 6.4 Solving Linear Systems Linear Combination/Elimination

6.5 Linear Systems and Problem Solving (word problems)

6.6 Systems of Linear Inequalities

Chapter 7 Exponents

7.1 Multiplication Properties of Exponents

7.2 Zero and Negative Exponents and Division Properties of Exponents
7.5 Graphs of Exponential Functions

http://www.khanacademy.org/math/algebra/algebra-functions/graphing_functions/v/graphing-exponential-functions

http://www.youtube.com/watch?v=8ZNpM7aSkuA

Chapter 8 Quadratic Expressions and Equations

8.1 Adding and Subtracting Polynomials


https://www.khanacademy.org/math/trigonometry/polynomial_and_rational/polynomial_tutorial/e/adding_and_subtracting_polynomials

8.2 Multiplying Polynomials

https://www.khanacademy.org/math/algebra/multiplying-factoring-expression/multiplying-binomials/v/multiplying-binomials

https://www.khanacademy.org/math/algebra/multiplying-factoring-expression/multiplying_polynomials/e/multiplying_polynomials

8.4 Special Products of Polynomials


8.5 Using the Distributive Property (GCF)


8.5 Solving Quadratic Equations in Factored Form


8.6 Factoring $x^2 + bx + c$


https://www.khanacademy.org/math/algebra/multiplying-factoring-expression/factoring-quadratic-expressions/e/factoring_polynomials_1
8.6 Factoring Cubic Polynomials

https://www.youtube.com/watch?v=qNXfJxRSP6s


https://www.khanacademy.org/math/trigonometry/polynomial_and_rational/factoring-higher-deg-polynomials/v/factoring-sum-of-cubes

https://www.khanacademy.org/math/trigonometry/polynomial_and_rational/factoring-higher-deg-polynomials/v/difference-of-cubes-factoring

8.7 Factoring $x^2 + bx + c$


https://www.khanacademy.org/math/algebra/multiplying-factoring-expression/factoring-quadratic-expressions/e/factoring_polynomials_1

8.8 and 8.8 Factoring Special Products


8.9 Square Roots & Perfect Squares

http://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-numbers-operations/cc-8th-roots/v/understanding-square-roots

Practice Problems:

http://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-numbers-operations/cc-8th-roots/e/square_roots

8.9 Solving Quadratic Equations by Finding Square Roots

http://www.khanacademy.org/math/algebra/quadratics/quadratics-square-root/v/simple-quadratic-equation

Chapter 9 Quadratic Functions and Equations

9.2 Solving Quadratic Equations by Graphing

https://www.youtube.com/watch?v=7GHsJNBwt9E
9.5 Solving Quadratic Equations by the Quadratic Formula

http://www.khanacademy.org/math/algebra/quadratics/quadratic-formula/v/quadratic-formula-1

Chapter 10 Radical Functions

10.1 Functions Involving Square Roots

http://hotmath.com/hotmath_help/topics/graphing-square-root-functions.html

10.2 Simplifying Radicals

http://www.khanacademy.org/math/arithmetic/exponents-radicals/radical-radicals/v/simplifying-radicals

Practice problems

http://www.khanacademy.org/math/arithmetic/exponents-radicals/radical-radicals/e/simplifying_radicals

Rationalize the Denominator

http://www.khanacademy.org/math/algebra/exponent-equations/simplifying-radical-expressions/v/how-to-rationalize-a-denominator

Using product/quotient properties of radicals

http://www.youtube.com/watch?v=RjQ5MzBeY-I

http://www.bing.com/videos/search?q=operations+with+radical+expressions&FORM=HDRSC3#view=detail&mid=923CC134005DB354986D923CC134005DB354986D

http://www.bing.com/videos/search?q=operations+with+radical+expressions&FORM=HDRSC3#view=detail&mid=3F80A18489CB39E256C93F80A18489CB39E256C9

http://www.bing.com/videos/search?q=rationalize+the+denominator&FORM=HDRSC3#view=detail&mid=799A041722FE5AE21045799A041722FE5AE21045

10.3 Operations with Radicals

http://www.bing.com/videos/search?q=operations+with+radical+expressions&FORM=HDRSC3#view=detail&mid=923CC134005DB354986D923CC134005DB354986D
10.4 Radical Equations

10.5 Pythagorean Theorem

Chapter 11 Rational Functions and Equations

2.6 Proportions

11.3 Simplifying Rational Expressions

11.4 Multiplying and Dividing Rational Expressions

11.6 Adding and Subtracting with Like Denominators
11.6 Adding and Subtracting with Unlike Denominators

http://www.bing.com/videos/search?q=adding+and+subtracting+with+unlike+denominators&&view=detail&mid=FC7590511A0F5535D00CFC7590511A0F5535D00C&FORM=VRDGAR

https://www.khanacademy.org/math/algebra/rational-expressions/rational_expressions/v/subtracting-rational-expressions

11.8 Rational Equations