**Chapter 2: Khan Academy Resources***Linear Equations*

**Section 1 – Writing Equations**

* Video: [Writing Simple Equations](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/representing-a-relationship-with-a-simple-equation)
* Exercise: [Writing Expressions](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/e/writing_expressions_1)

**Section 2 – Solving One-Step Equations**

* Videos: [Adding and Subtracting to solve Equations](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/adding-and-subtracting-the-same-thing-from-both-sides)  
   [Dividing from Both Sides](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/intuition-why-we-divide-both-sides)[One-Step Equation Intuition](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/one-step-equation-intuition)
* Exercise: [One-Step Equations](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/e/one_step_equations)

**Section 3 – Solving Multi-Step Equations**

* Video: [Solving Multi-Step Equations](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/equations-2)
* Exercise: [Two-Step Equations](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/e/linear_equations_2)[Multi-Step Equations](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/e/linear_equations_4) (higher difficulty)

**Section 4 – Solving Equations with Variables on Both Sides**

* Videos: [Equations with Variables on Both Sides](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/equations-with-variables-on-both-sides)

[Solving Equations with the Distributive Property](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/solving-equations-with-the-distributive-property)

* Exercise: [Equations with Variables on Both Sides](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/e/linear_equations_3)

**Section 5 – Solving Equations with Absolute Values**

* Videos: [Absolute Value Equations 1](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/absolute-value-equations-1?exid=absolute_value_equations)

[Absolute Value Equations 2](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/absolute-value-equations-1?exid=absolute_value_equations) (higher difficulty)

* Exercise: [Absolute Value Equations](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/e/absolute_value_equations)

**Section 6 – Ratio and Proportions**

* Videos: [Understanding Proportions](http://www.khanacademy.org/math/arithmetic/basic-ratios-proportions/v/understanding-proportions)

[Solving Proportions](http://www.khanacademy.org/math/arithmetic/basic-ratios-proportions/v/find-an-unknown-in-a-proportion-2)

* Exercise: [Writing Proportions from Word Problems](http://www.khanacademy.org/math/arithmetic/rates-and-ratios/e/writing_proportions)

[Solving Proportions](http://www.khanacademy.org/math/arithmetic/rates-and-ratios/e/proportions_1)

[Solving Proportions](http://www.khanacademy.org/math/arithmetic/rates-and-ratios/e/proportions_2) (higher difficulty)

**Section 7 – Percent of Change**

* Videos: [Basic Percentages](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/taking-percentages?exid=percentage_word_problems_1)

[Percentage Word Problem](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/another-percent-word-problem)

[More percent problems](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/more-percent-problems)

[Percent Growth](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/growing-by-a-percentage)

* Exercise: [Tax and Tip Word Problems](http://www.khanacademy.org/math/arithmetic/percents/e/discount_tax_and_tip_word_problems)

[Percent Word Problems](http://www.khanacademy.org/math/arithmetic/percents/e/percentage_word_problems_1)

[Percent Word Problems](http://www.khanacademy.org/math/arithmetic/percents/e/percentage_word_problems_2) (higher difficulty)

**Section 8 – Literal Equations and Dimensional Analysis**

* Video: [Solving for a Variable](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/solving-for-a-variable) (Example 1)

[Solving for a Variable](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/solving-for-a-variable-2) (Example 2)

[Solving for a Variable](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/example-of-solving-for-a-variable?exid=solving_for_a_variable) (Example 3)

* Exercise: [Solving Equations in terms of a Variable](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/e/solving_for_a_variable)

**Section 9 – Weighted Averages**

* Video: [Intro to Averages](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/averages?exid=average_word_problems)
* Exercise: [Finding Averages](http://www.khanacademy.org/math/statistics/e/average_word_problems)