**Chapter 3: Khan Academy Resources***Linear Functions*

**Section 1 – Graphing Linear Equations**

* Video: [X and Y Intercepts](http://www.khanacademy.org/math/algebra/linear-equations-and-inequalitie/v/x--and-y-intercepts)

[Plotting (x, y) relationships](http://www.khanacademy.org/math/algebra/linear-equations-and-inequalitie/v/plotting--x-y--relationships?exid=plugging_in_values)

[Linear Equations in Standard Form](http://www.khanacademy.org/math/algebra/linear-equations-and-inequalitie/v/linear-equations-in-standard-form)

* Exercise: [Solving for the y-intercept](http://www.khanacademy.org/math/algebra/linear-equations-and-inequalitie/e/solving_for_the_y-intercept)  
   [Solving for the x-intercept](http://www.khanacademy.org/math/algebra/linear-equations-and-inequalitie/e/solving_for_the_x-intercept)  
   [Equations from tables](http://www.khanacademy.org/math/algebra/linear-equations-and-inequalitie/e/plugging_in_values)[Converting between slope-intercept and standard form](http://www.khanacademy.org/math/algebra/linear-equations-and-inequalitie/e/converting_between_slope_intercept_and_standard_form)

**Section 2 – Solving Linear Equations by Graphing**

* Videos: [Graphing a Basic Function](http://www.khanacademy.org/math/algebra/algebra-functions/v/graphing-a--basic-function)  
   [X and Y Intercepts](http://www.khanacademy.org/math/algebra/linear-equations-and-inequalitie/v/x--and-y-intercepts)
* Exercise: [Understanding function notation](http://www.khanacademy.org/math/algebra/algebra-functions/e/functions_1)[Solving for the x-intercept](http://www.khanacademy.org/math/algebra/linear-equations-and-inequalitie/e/solving_for_the_x-intercept)

**Section 3 – Rate of Change and Slope**

* Video: [Slope of a Line](http://www.khanacademy.org/math/algebra/linear-equations-and-inequalitie/v/slope-of-a-line)
* Exercise: [Identifying Slope of a Line](http://www.khanacademy.org/math/algebra/linear-equations-and-inequalitie/e/slope_of_a_line)

**Section 4 – Direct Variation**

* Videos: [Direct and Inverse Variation](http://www.khanacademy.org/math/algebra/algebra-functions/v/direct-and-inverse-variation?exid=direct_and_inverse_variation)

[Recognizing Direct and Inverse Variation](http://www.khanacademy.org/math/algebra/algebra-functions/v/recognizing-direct-and-inverse-variation?exid=direct_and_inverse_variation)

* Exercise: [Direct and inverse variation](http://www.khanacademy.org/math/algebra/algebra-functions/e/direct_and_inverse_variation)

**Section 5 – Arithmetic Sequences as Linear Functions**

* Videos: [Patterns in Sequences](http://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/v/patterns-in-sequences-1)