MAT-121: COLLEGE ALGEBRA

Video Resources: Sections 2.1–2.3

SECTION 2.1—THE RECTANGULAR COORDINATE SYSTEM AND GRAPHS

Plotting Ordered Pairs in the Cartesian Coordinate System

Khan Academy. (2012, February 15). *Introduction to the coordinate plane | Introduction to algebra | Algebra I | Khan Academy* [Video]. YouTube.

Mathispower4u. (2014, August 14). *Introduction to the cartesian plane - Part 1 (L8.1A)* [Video]. YouTube.

Mathispower4u. (2011, September 12). *Identify the quadrant of a point on the coordinate plane* [Video]. YouTube.

Graphing Equations by Plotting Points

Mathispower4u. (2009, June 10). *Graphing equations by plotting points - Part 2* [Video]. YouTube.

Mathispower4u. (2015, April 14). *Graphing by plotting points - linear (I6.3)* [Video]. YouTube.

Graphing Equations with a Graphing Utility

Mathispower4u. (2010, October 5). *Graphing lines on the TI83 or TI84* [Video]. YouTube.

Finding x-Intercepts and y-Intercepts

Khan Academy. (2015, April 21). *Introduction to intercepts | Algebra I | Khan Academy* [Video]. YouTube.

Mathispower4u. (2016, May 1). *Graph linear equations using intercepts* [Video]. YouTube.

Mathispower4u. (2018, February 22). *Interpret the meaning of the intercepts of a graph (sales and profit)* [Video]. YouTube.

Khan Academy. (2013, August 10). *Finding the x-intercept of a line | Algebra I | Khan Academy* [Video]. YouTube.

Using the Distance Formula

Mathispower4u. (2015, October 6). *Ex: Determine the distance between two points using the pythagorean theorem* [Video]. YouTube.

Mathispower4u. (2015, October 6). *Ex: Find the shortest distance between two locations north and west* [Video]. YouTube.

Using the Midpoint Formula

Mathispower4u. (2011, November 22). *Ex: Midpoint of a segment* [Video]. YouTube.

Mathispower4u. (2012, September 18). *Ex 1: Find standard equation of a circle given the endpoints of a diameter* [Video]. YouTube.

SECTION 2.2—LINEAR EQUATIONS IN ONE VARIABLE

Solving Linear Equations in One Variable

Mathispower4u. (2012, December 14). *Ex: Solving linear equations in one variable with parentheses* [Video]. YouTube.

Mathispower4u. (2014, August 12). *Solving multi-step equations (L5.4)* [Video]. YouTube.

Solving Rational Equations

Mathispower4u. (2010, July 8). *Solving rational equations* [Video]. YouTube.

Mathispower4u. (2016, June 23). *Solve basic rational equations* [Video]. YouTube.

Khan Academy. (2016, March 8). *Equations with rational expressions | Mathematics III | High School Math | Khan Academy* [Video]. YouTube.

Finding a Linear Equation

Khan Academy. (2015, April 22). *Slope-intercept form | Algebra I | Khan Academy* [Video]. YouTube.

Khan Academy. (2015, April 21). *Introduction to slope | Algebra I | Khan Academy* [Video]. YouTube.

Mathispower4u. (2016, January 15). *Ex: Determine the slope of a line given two points (horizontal and vertical)* [Video]. YouTube.

The Point Slope Formula

Khan Academy. (2013, August 5). *Introduction to point-slope form | Algebra I | Khan Academy* [Video]. YouTube.

Mathispower4u. (2011, September 9). *Ex: Find the equation of a line in point slope and slope intercept form given the slope and a point* [Video]. YouTube.

Mathispower4u. (2011, September 9). *Ex: Find the equation of the line in point-slope and slope intercept form given two points* [Video]. YouTube.

Standard Form

Khan Academy. (2015, April 22). *Standard form for linear equations | Algebra I | Khan Academy* [Video]. YouTube.

Mathispower4u. (2010, September 14). *Linear equations in standard form* [Video]. YouTube.

Mathispower4u. (2011, September 7). *Ex 1: Find the equation of a line in standard form given two points* [Video]. YouTube.

Vertical and Horizontal Lines

Mathispower4u. (2014, August 14). *Graphing horizontal and vertical lines (I8.6)* [Video]. YouTube.

Khan Academy. (2017, March 27). *Horizontal & vertical lines | Mathematics I | High School Math | Khan Academy* [Video]. YouTube.

Determining Whether Graphs of Lines Are Parallel or Perpendicular

Khan Academy. (2015, July 16). *Parallel and perpendicular lines intro | Analytic geometry | Geometry | Khan Academy* [Video]. YouTube.

Khan Academy. (2018, June 18). *Parallel & perpendicular lines from graph* [Video]. YouTube.

Writing the Equations of Lines Parallel or Perpendicular to a Given Line

Mathispower4u. (2010, September 21). *Parallel and perpendicular lines - Part 2* [Video]. YouTube.

Mathispower4u. (2016, May 1). *Determine the equation of a line perpendicular to a line in slope-intercept form* [Video]. YouTube.

SECTION 2.3—MODELS AND APPLICATIONS

Setting Up a Linear Equation to Solve a Real-World Application

Mathispower4u. (2016, January 17). *Ex: Write a linear equation that models cricket chirps (linear equation application)* [Video]. YouTube.

Mathispower4u. (2016, January 17). *Ex: Write a linear equation that models depreciation (linear equation application)* [Video]. YouTube.

Using a Formula to Solve a Real-World Application

Khan Academy. (2011, September 30). *Perimeter and area: the basics | Perimeter, area, and volume | Geometry | Khan Academy* [Video]. YouTube.

Mathispower4u. (2016, May 13). *Problem solving using distance, rate, time (running)* [Video]. YouTube.

Mathispower4u. (2011, December 6). *Ex: Find the size of cardboard needed to make a box with a given volume* [Video]. YouTube.