College Algebra Fundamentals

Section P-3 (Part 3): Graphs of Equations

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Objectives**:

* Students will be able to graph an equation using a table of values.
* Students will be able to find the x- and y-intercepts of an equation.

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| **Main Idea** | **Notes** |
| **Vocabulary:**  **Example 1: Solution Points**  **Vocabulary:**  **Example 2: Graphing Using a Table of Values**  **Vocabulary** | Many times, a relationship between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is  expressed as an equation in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  Example:  When is an ordered pair (a, b) a solution or solution point of an equation in x and y?  Is (1, 4) is a solution of y = 7 – 3x? Why or why not?  What is the graph of an equation?  Graph y = x² - 4x using a table of values.   |  |  | | --- | --- | | x | y | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |   http://s3.amazonaws.com/edcanvas-uploads/117591/local/1380306229/coordinate-plane1-1005x1024.png  It is often easy to find solution points that have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as either the  x-coordinate or y-coordinate.  These points are called intercepts because they are the points where the graph  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  A graph could have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ intercept, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ intercepts, or  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ intercepts. |
| **Example 3: Finding x- and y-intercepts** | 1. Find the x- and y-intercepts of x - 2y = 12 2. Find the x- and y-intercepts of y² = x + 4 3. Find the x- and y-intercepts of 3x – 4y = 24 |
| **Homework:** |