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.

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| x | y |
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 http://s3.amazonaws.com/edcanvas-uploads/117591/local/1380306229/coordinate-plane1-1005x1024.pngIt 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
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| **Homework:** |