

# Math 1513 - College Algebra

## Written Assignment 13 - Due 2015.11.15

---

Directions: Please answer the following question in complete sentences. Be sure to label all geometric objects in any illustrations. I will accept an answer in a scanned image format, in a Word document or as a pdf.

Problem: Consider the following system of equations:

$$\begin{cases} 2x - 3y = 2, \\ 4x + 2y = -1 \\ -5x - 6y = d \end{cases}$$

For what value of  $d$  does the above system have a solution? For this value of  $d$ , graph all three equations on the same axis. What do you notice?