

# Math 1513 - College Algebra

## Written Assignment 15 - Due 2011.04.30

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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.

Give an very thorough description/algorithm of how one solves a system of  $m$  linear equations which have  $n$  variables. Important questions to answer in this process: (1) What happens when  $m < n$ ,  $m = n$ ,  $m > n$ ? (2) What guarantees a solution, a unique solution, no solution? (3) What hiccups may arise in your general approach to solving the system of equations?