

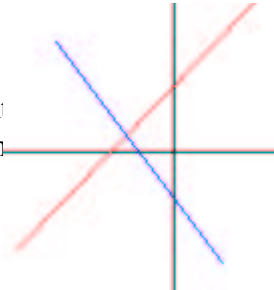
Simultaneous Linear Equations

The solution to a linear equation in 2 variables (x,y) is a line, with an infinite number of solutions. If we have the need to solve two linear equations in 2 variables there are three possible scenarios.

First, the two lines could be parallel and have no points in common
There are NO Solutions in this case



Second, the two lines meet in one point
Then there is one solution to the system



Third, the two lines are actually the same line
Then there is an infinite number of solutions

