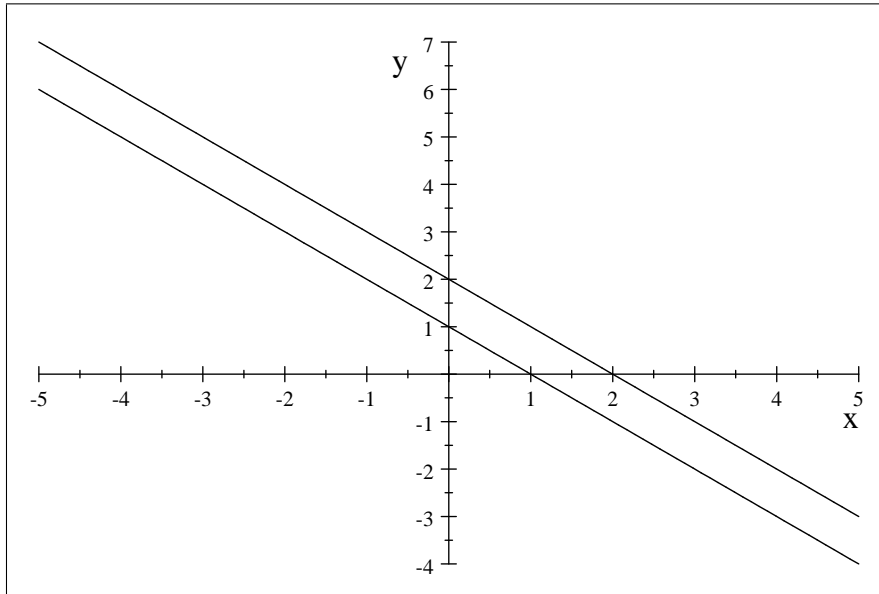


Case (i)

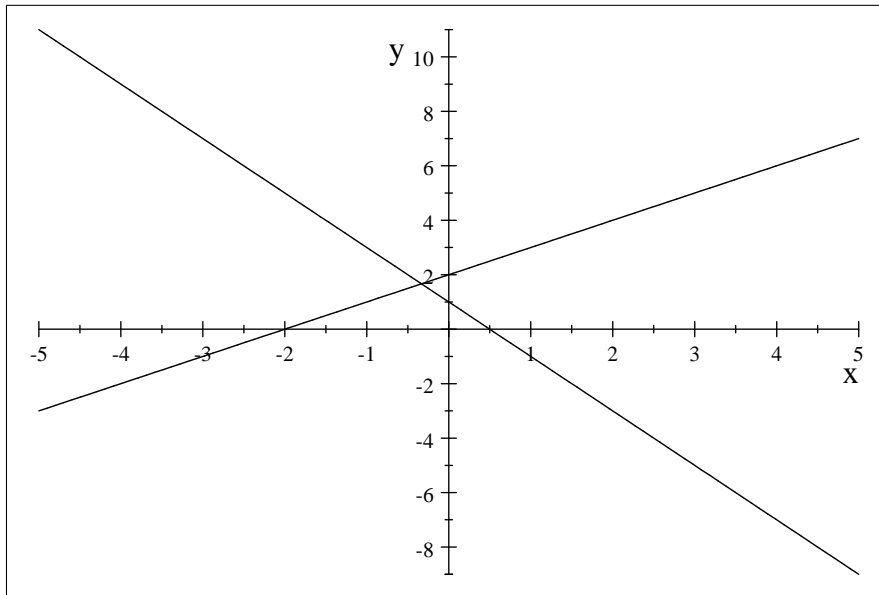
For the system:
$$\begin{cases} x + y = 1 \\ x + y = 2 \end{cases}$$



Here the above two equations represent the straight lines, if you solve these equation (by any method), then you find that the system has no solution. So its corresponding graphs will never meet.

Case (ii)

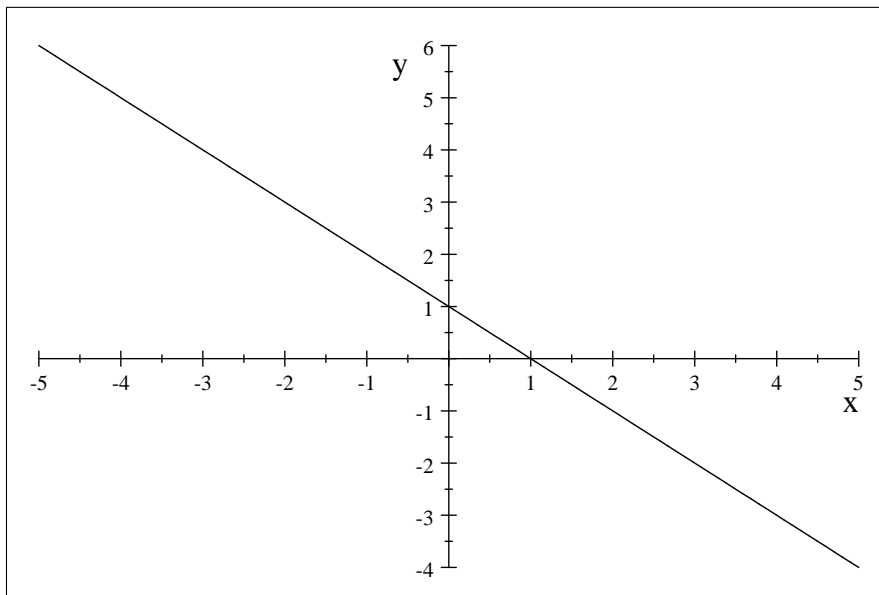
For the system:
$$\begin{cases} 2x + y = 1 \\ x + y = 2 \end{cases}$$
, Solution is: $[x = -1, y = 3]$



For the second case, there is a unique solution, and both these lines correspondingly meet at a single point.

Case (iii)

For the system:
$$\begin{cases} x + y = 1 \\ 2x + 2y = 2 \end{cases}$$



Here the both equations have infinite many solutions, as there are infinite many values of x and y which may satisfy the both equations. That's why their graphs coincide each other.