

Step-1

Given that the equations of three planes:

$$x + y + z = 2$$

$$x + 2y + z = 3$$

$$2x + 3y + 2z = 9$$

And given that the first two planes meet along a line.

We have to explain why the three equations have no solution.

Step-2

From the equations; we observe that the left hand side of the third equation occurs by adding the left hand side of the first two equations where as the right hand side is not.

So the given equations have no solution, and hence third plane does not intersect the intersection line L of the first two planes.