**Ex-)**

## 83x+11y-4z=95

## 7x+52y+13z=104

## 3x+8y+29z=71

Ans)

x=1/83[95-11y+4z]-----------------------------(1)

y=1/52[104-7x-13z]----------------------------(2)

z=1/29[71-3x-8y]-------------------------------(3)

First Approximation-

Put y=z=0 into---------------------(1),we get x=1.45

Put x=1.45 and z=0 into---------------------(1),we get y=1.846

Put x=1.45 and y=1.846 into---------------------(1),we get z=1.821

Second Approximation-

Put y=1.846 and z=1.821 into---------------------(1),we get x=0.988

Put x=0.988 and z=1.821 into---------------------(1),we get y=1.412

Put x=0.988 and y=1.412 into---------------------(1),we get z=1.956

Third Approximation-

Put y=1.412 and z=1.956 into---------------------(1),we get x=1.052

Put x=1.052 and z=1.956 into---------------------(1),we get y=1.344

Put x=1.052 and y=1.344 into---------------------(1),we get z=1.969

After this value of x, y, z gets constant up to three decimal places so they are the required answers