Pair of Linear Equations in Two varibles Ex 3.2 Q23

Answer :

(i) The given equations are

$y = x$ .....(i)

$y = 2x$ .....(ii)

$y + x = 6$ .....(iii)

The two points satisfying (i) can be listed in a table as,

x	0	1
y	0	1

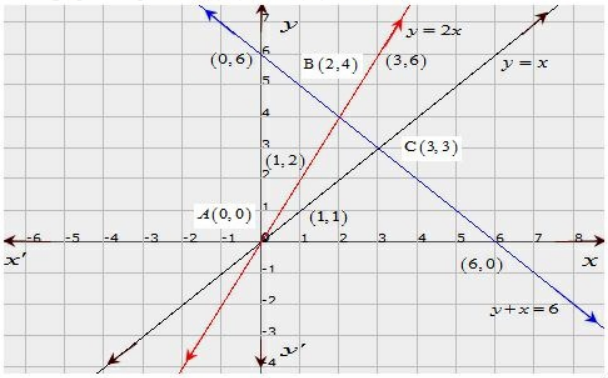
The two points satisfying (ii) can be listed in a table as,

x	1	3
y	2	6

The two points satisfying (iii) can be listed in a table as,

x	0	6
y	6	6

Now, graph of equations (i), (ii) and (iii) can be drawn as,



It is seen that the coordinates of the vertices of the obtained triangle are $A(0,0)$, $B(2,4)$, $C(3,3)$

(ii) The given equations are

$y = x$ .....(i)

$3y = x$ .....(ii)

$x + y = 8$ .....(iii)

The two points satisfying (i) can be listed in a table as,

x	0	2
y	0	2

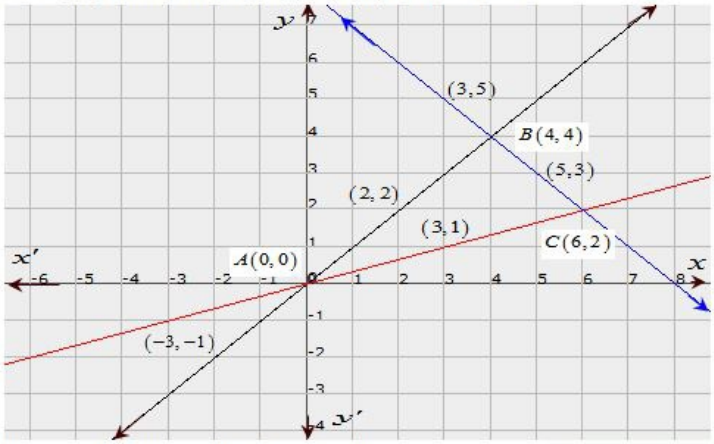
The two points satisfying (ii) can be listed in a table as,

x	3	–3
y	1	–1

The two points satisfying (iii) can be listed in a table as,

x	3	5
y	5	3

Now, graph of equations (i), (ii) and (iii) can be drawn as,



It is seen that the coordinates of the obtained triangle are $A(0,0)$, $B(4,4)$, $C(6,2)$

********** END **********