Step-1

Given two equations are

$3x-2y=b_1$
$6x-4y=b_2$

We have to find that what relation between $b_1 \text{and} b_2$ will give the solution for the system and we have to find that how many of solutions the system has. And we have to draw the column picture for this.

Step-2

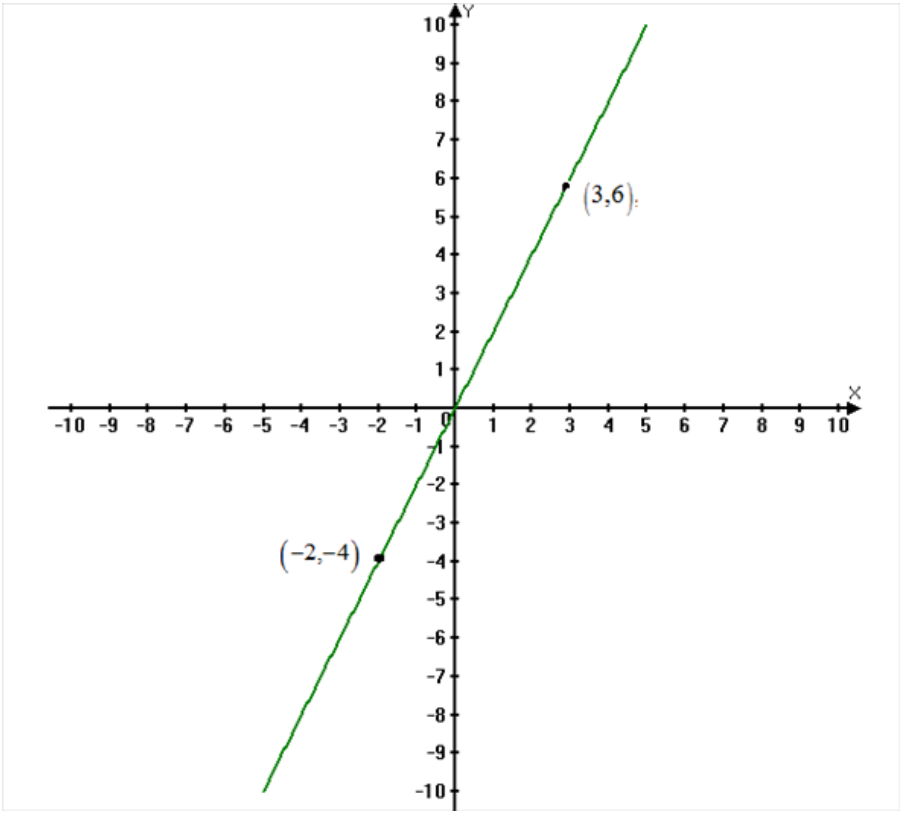
We can observe that $6x-4y$ is 2 times of $3x-2y$, therefore if $b_2=2b_1$ then the system becomes as only one equation. So that in this case the system has infinite number of solutions.

The column form for the system is

$$x\begin{pmatrix}3\\6\end{pmatrix}+y\begin{pmatrix}-2\\-4\end{pmatrix}=\begin{pmatrix}b_1\\2b_1\end{pmatrix}$$

Step-3

The column picture for this system is as follows:



The columns $(3,6),(-2,-4)$ are lies on the same line.