

MATRICES

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Contents

1 Problem	1
2 Solution	1
3 Plot	1
4 Software	1

1 Problem

Q.Find the equation of the line parallel to the line $3x-4y+2=0$ and passing through the point $(-2,3)$.

2 Solution

Given equation is $3x-4y+2=0$
the line parallel to given equation is

$$3x-4y+k=0$$

the parallel line passing through

point $(-2,3)$

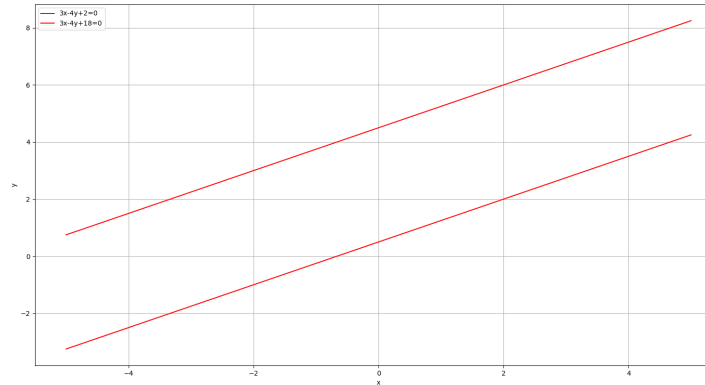
$$3(-2)-4(3)+k=0$$

$$-6-12+k=0$$

$$k=18$$

therefore,the equation parallel to the given equation and passing through the point $(-2,3)$ is $3x-4y+18=0$

3 Plot



4 Software

We can get the parallel equation of given equation and the plot of two equations by executing the following code:

<https://github.com/Gowthami/fwc-1-module1/blob/main/par.py>