## Linear Equations in Two Variables

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## $10^{th}$ Maths - Chapter 3

This is Problem-2.3 from Exercise 3.2

1.

## **Solution:**

Given Data:6x - 3y = -27

$$2x - y = -9$$

This can also be written as:

$$\begin{pmatrix} 6 & -3 & -27 \\ 2 & -1 & -9 \end{pmatrix} \tag{1}$$

now, Making  $R_2 \rightarrow R_1 - 3R_2$  we get,

$$\begin{pmatrix}
6 & -3 & -27 \\
0 & 0 & 0
\end{pmatrix} 
\tag{2}$$

Since, we are getting zero in  $R_2$  It is a dependent equation.