

# Chapter Name

Enter your name (mail)

July 31, 2023

## 10<sup>th</sup> Maths - Chapter 4

Solve the problems given in Example-1

1. John and Jivanti together have 45 marbles. Both of them lost 5 marbles each, and the product of the number of marbles they now have is 124. We would like to find out how many marbles they have to start with.

**Solution:**

Given Data:

Let the number of marbles John had be x

Then, the number of marbles Jivanti had = 45 - x

The number of marbles left with John, when he lost 5 marbles = x - 5

The number of marbles left with Jivanti, when she lost 5 marbles = 45 - x - 5 = 40 - x

$$\mathbf{AX} = \mathbf{B} \quad (1)$$

$$\frac{\begin{vmatrix} b & a_2 \end{vmatrix}}{\begin{vmatrix} a_1 & a_2 \end{vmatrix}} = \frac{\begin{vmatrix} 4 & -1 \\ 10 & 1 \end{vmatrix}}{\begin{vmatrix} 1 & -1 \\ 1 & 1 \end{vmatrix}} \quad (2)$$

Ex of creating a matrix -  $\begin{pmatrix} 1 & 2 \\ 3 & 4 \end{pmatrix}$

Ex of using fraction and brak -  $\frac{(\mathbf{B}-\mathbf{A})(\mathbf{C}-\mathbf{B})^\top}{\|\mathbf{C}-\mathbf{B}\|^2}$

type your solutions using these commands