Statistics - Class XI

Past Year JEE Questions

Questions

Quetion: 01

The mean of set of 30 observations is 75. If each observation is multiplied by a non-zero number λ and then each of them is decreased by 25, their mean remains the same. Then λ is equal to :

A. $\frac{1}{3}$

B. $\frac{2}{3}$

C. $\frac{4}{3}$

D. $\frac{10}{3}$

Solutions

Solution: 01

Explanation

As mean is a linear operation, so if each observation is multiplied by λ and decreased by 25 then the mean becomes $75\lambda - 25$.

According to the question,

$75\lambda - 25 = 75 \Rightarrow \lambda = \frac{4}{3}$.