Question 13: The equation x – 2/(x-1) = 1 – 2/(x-1) has

(a) no root

(b) one root

(c) two equal roots

(d) infinitely many roots

Solution:

Given x – 2/(x-1) = 1 – 2/(x-1)

Clearly x ≠ 1 for the given equation to be defined. If x-1 ≠ 0, we can cancel the common term -2/(x-1) on both sides to get x = 1, but it is not possible. Thus the given equation has no roots.

Hence option a is the answer.