

Q. If A and B are two independent events such that  $P(A \cap B') = 3/25$  and  $P(A' \cap B) = 8/25$ , then  $P(A) =$

Soln  $\rightarrow P(A \cap B') = P(A) \times P(B') = 3/25$   
 $P(A) \times (1 - P(B)) = 3/25 \quad \text{--- (i)}$

$P(A' \cap B) = 8/25$

$\rightarrow P(B) (1 - P(A)) = 8/25 \quad \text{--- (ii)}$

by eq. (i) and (ii)

$P(A) = 1/5, P(B) = 3/5$  Ans.