

## Relations-and-Functions - Class XI

### Related Questions with Solutions

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#### Questions

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##### Question: 01

If  $n(A)$  denotes the number of elements in set  $A$  and if  $n(A) = 4$ ,  $n(B) = 5$  and  $n(A \cap B) = 3$ , then  $n[(A \times B) \cap (B \times A)] =$

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#### Solutions

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##### Solution: 01

Given  $n(A) = 4$ ,  $n(B) = 5$ ,  $n(A \cap B) = 3$   
 $n[(A \times B) \cap (B \times A)] = n[(A \cap B) \times (B \cap A)]$   
 $= n(A \cap B) \times n(B \cap A) = 3 \times 3 = 9$   $[\because n(A \times B) = n(A) \times n(B)]$

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#### Correct Options

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Answer:01

Correct Answer: 9