

- Q.1 If $A = \{7, 8\}$ and $B = \{2, 4, 6\}$, find
- (a) $A \times B$ (b) $B \times A$
- (c) $A \times A$ (d) $B \times B$.
- Q.2 If $A \times B = \{(p, x), (p, z), (q, x), (q, z)\}$. Find A and B .
- Q.3 If $A = \{2, 4, 6\}$ and $B = \{3, 6\}$ and $C = \{1, 5, 6\}$. Find $(A \times B) \cap (B \times C)$.
- Q.4 Let A and B be two sets such that $A \times B$ consists of 6 elements. If three elements of $A \times B$ are $(X, 6), (Y, 7), (Z, 7)$, then find $B \times A$.
- Q.5 Verify that $A \times (B \cup C) = (A \times B) \cup (A \times C)$, if $A = \{1, 2, 3\}$, $B = \{4\}$ and $C = \{5\}$.

