

Relations-and-Functions - Class XI

Related Questions with Solutions

Questions

Question: 01

Let $x = \{1, 2, 3, 4\}$ and $Y = \{1, 3, 5, 7, 9\}$. Which of the following is relations from x to Y -

- A. $R_1 = \{(x, y) / y = 2 + x, x \in X, y \in Y\}$
B. $R_2 = \{(1, 1), (2, 1), (3, 3), (4, 3), (5, 5)\}$
C. $R_3 = \{(1, 1), (1, 3), (3, 5), (3, 7), (5, 7)\}$
D. $R_4 = \{(1, 3), (2, 5), (2, 4), (7, 9)\}$

Solutions

Solution: 01

Q $x = \{1, 2, 3, 4\}$
 $y = \{1, 3, 5, 7, 9\}$

Q $[5, 5] \notin R_2$

While, $5 \notin X$

So, R_2 is not a relation from X to Y .

Q $[5, 7] \in R_3$

While, $5 \notin X$

So, R_3 is not a relation from X to Y .

Q $[7, 9] \notin R_4$

While $7 \notin X$

So, R_4 is not a relation from X to Y .

Correct Options

Answer:01

Correct Options: D