If the ordered pairs of G is reversed, the relation also changes.

$B \times A = \{(2,1)(4,1)(2,3),(4,3)\}$ then $A = (3,1)$, $B = (4,2)$

Generally an nary relation R blw sets $A_1, \ldots$ and $A_n$ is a subset of nary product $A_1 \times \ldots A_n \times A_n$.

eg $A \times B = \{(1,2)(1,4)(3,2)(3,4)\}$

$C = (a,b)$

$\Rightarrow \{(1,2,a)(1,2,b) \ldots\}$

* The minimum cardinality of a Relation R is zero and maximum is $n^2$ In this case

eg if 2 elements then cardinality is $2^2 = 4$

3 $3^2 = 9$

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A binary relation R on a single set A is subset of $A \times A$.

Example: let $A = \{a,b,c\}$, $B = \{u,s,t\}$

$A \times B = \{(a,u)(a,s)(a,t)(b,u)(b,s)(b,t),(c,u)(c,s),(c,t)\}$

Then $R = \{(a,u)(b,u)(b,t),(c,s)\}$ is a relation from A to B // On apply any condition.

ii) $A = \{1,2,3\}$ & $B = A$ Given.

only 1 set is given.