Representation of relations:

If A and B are finite sets, we list three different ways of picturing a relation from A to B.

1) A coordinate diagram

Represent the elements of A as points on some horizontal axis, and the element of B as points on some vertical axis, the elements of AXB are then represent by points of intersection of the vertical lines through the points of A and the horizontal lines through the points of B.

Example:

Let A = {1,2,3}, the relation R on A such that: $aRb \leftrightarrow a > b; a,b \in A$

$R = \{(2,1),(3,1),(3,2)\}$