

Function

Let A and B any two non empty sets, Then function from A to B is a rule that assign to each element of set A, one and only one element of set B.

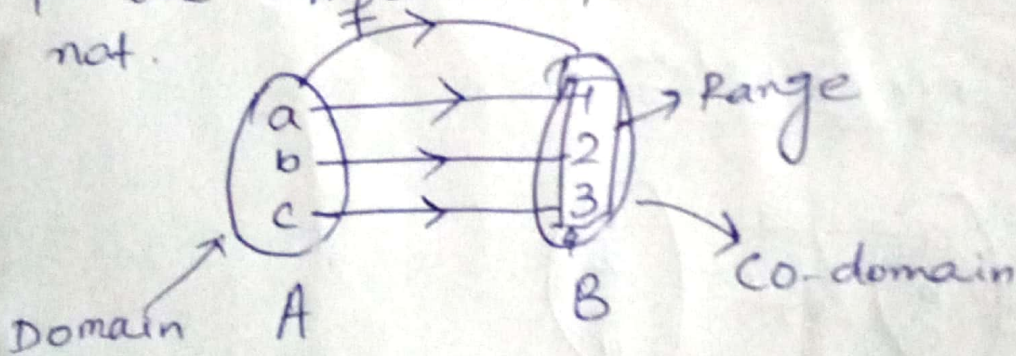
Mathematically

$$f: A \rightarrow B$$

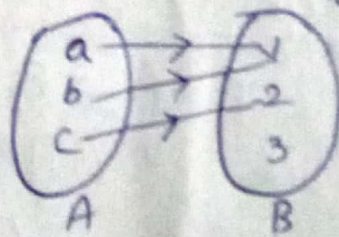
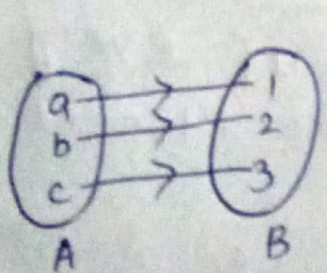
where $y = f(x)$, $x \in A$ and $y \in B$

Types

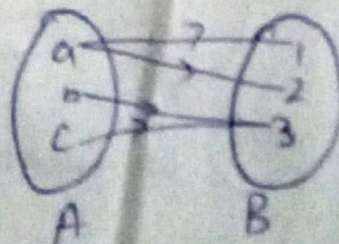
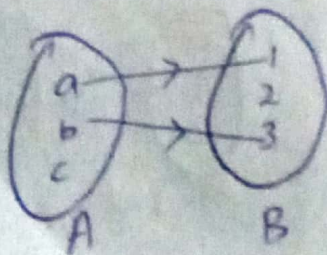
1st we will check, this is function or not.



②



Function X

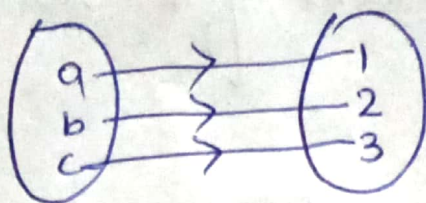


Function X

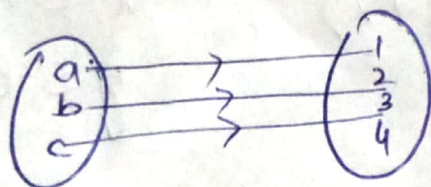
Types of Function

① one - one (Injective)

Function $F: A \rightarrow B$ is one-one (injective), if image of distinct element of A are distinct under f .

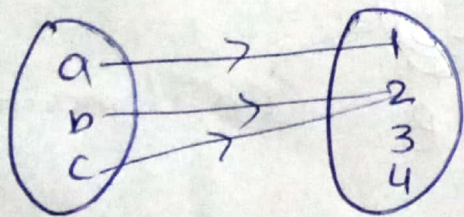


Ex - 1



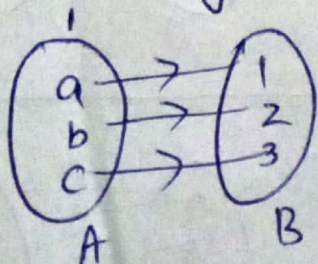
One - one

② many - one function

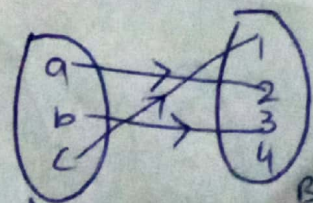


③ Onto (surjective) and Into function

Function $F: A \rightarrow B$ is onto if every element of B is image of some element of A .
(i.e. $A=B$)



Onto function



Into function

