

Function

Function (mapping)

Definition:

A function is relation between two sets A and B such that for every element in A has a unique element in B. a function  $F:A \rightarrow B$

The set A is called the domain of the function, and the set B is called the Co-domain and  $f(A)$  is called the range of the function.

Example 1:

Consider the function  $f(x) = x^3$ , i.e., f assigns to each real number its cube.

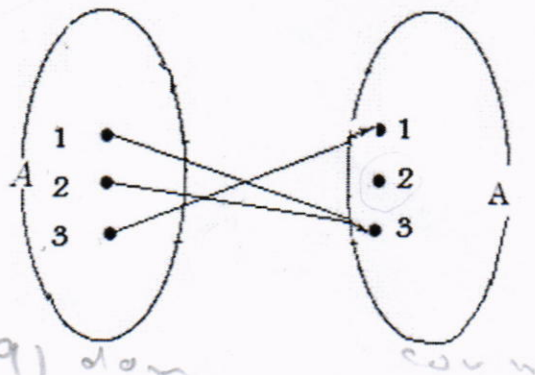
Then the image of 2 is 8, and so we may write  $f(2) = 8$ .

Example 2 :

consider the following relation on the set  $A=\{1,2,3\}$

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

F is a function



$$F = (2, 8), (3, 9) \text{ dom}$$

