

SetsDefination:

A set is a collection of well defined objects which are distinct from each other

Example:

The collection of first five prime number is a set containing the element 2, 3, 5, 7, 11.

Representing sets:(i) Roster form:

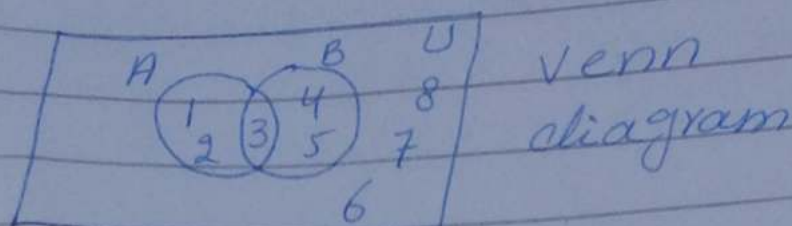
In this method a sets is described by listing element separated by commas and enclose them by curly bracket

Example:

$$P = \{2, 3, 5, 7, 11\}$$

Rule:

order of element in a sets doesn't matter.



Operation on sets

Union of two sets:

$$A \cup B = \{x : x \in A \text{ or } x \in B\}$$

Example:

$$A = \{1, 2, 3\}, B = \{2, 3, 4\}$$

$$A \cup B = \{1, 2, 3, 4\}$$



Preview from Notesale.co.uk
Page 8 of 12

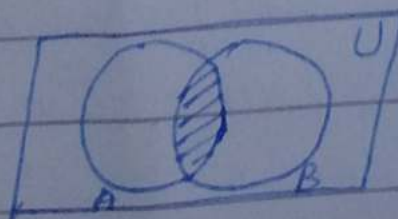
Intersection of two sets:

$$A \cap B = \{x : x \in A \text{ and } x \in B\}$$

Example:

$$A = \{1, 2, 3\}, B = \{2, 3, 4\}$$

$$A \cap B = \{2, 3\}$$



$A \cap B$