

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

S. Choudhury

$$A \subseteq B //$$

Proper Subset

(A set is a proper subset of B set if A has members of B set but B set has extra members of A set)

C -

$$A \subset B \leftrightarrow (x) [x \in A \rightarrow x \in B] \text{ \& } A \neq B$$

or

$$A \subseteq B \text{ \& } A \neq B$$

$$A = \{1, 2\}$$

$$B = \{1, 2, 3\} \quad \begin{matrix} A \subset B \\ A \subseteq B \end{matrix}$$

⊛ Subset and Proper Subset are different concepts?

Def - $A \subseteq B \leftrightarrow (x) [x \in A \rightarrow x \in B]$

Ans - A and B are two sets. If A set has any member which is also in B set, then A is a subset of B. But if B has any member which is not in A, then A is a proper subset of B.

Ans - $A \subset B \leftrightarrow (x) [x \in A \rightarrow x \in B] \text{ \& } A \neq B$

Ans - A and B are two sets. If A set has any member which is also in B set, then A is a subset of B. But if B has any member which is not in A, then A is a proper subset of B.

यदि B set का 3 member है तो A में
 B set का यदि कोई भी member होगा
 member होगा वह एक-एक करके होगा
 यदि A और B का Proper subset,
 अतः हमें उनसे हमें Proper subset
subset और subset और Proper subset
subset और Proper subset
 यदि A और B, उनसे यदि set यदि
 Identical है तो वह subset
subset और Proper subset

$$\begin{aligned}
 A &= \{1, 2\} \\
 B &= \{1, 2, 3\}
 \end{aligned}$$

यदि $A \subseteq B$ का अर्थ $A \subset B$ ~~है~~
 अतः यदि, उनसे $A = \{1, 2\}$
 $B = \{1, 2\}$

यदि $A \subseteq B$ अर्थात् $A \subset B$
 अर्थात्

Transitive

R transitive in a ~~set~~ (set)
 $\leftrightarrow (1) (2) (3) [x \in A \& y \in A \& B \in A \& x R y \& y R z$
 $\rightarrow x R z]$

$$\begin{aligned}
 A &\subseteq B & A &= \{1, 2\} \\
 B &\subseteq C & B &= \{1, 2, 3\} \\
 \therefore A &\subseteq C & C &= \{1, 2, 3\}
 \end{aligned}$$