

Set in Mathematics

Set

Subset

Superset

Proper subset

Proper superset

Disjoint set

$s=\{1,2,3,4,5,6,7,8,9,10\}$ # this is a set

- A set in mathematics cannot have a duplicate value

$A=\{1,2,3,5,7\}$

Comparing elements of s with A .

So it is having elements that are part of s

We say A is a subset of s

$A \subseteq s$

So A is part of s

$B=\{5, 7, 9, 10\}$

$B \subseteq s$

B is also a subset of s

- Whenever we say $A \subseteq s$ then s is superset for A
- Whenever we say $B \subseteq s$ then s is superset for B

$c=\{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$

All elements are present in s

$c=s$ or $c \subseteq s$ # we can call c equals to s or c is subset of s

Who is proper subset?

- A proper subset means it should have some values from superset not all values

$D=\{1, 2, 3, 4, 5\}$

$E=\{6, 7, 8, 9, 10\}$

What are common among them

So, there are no elements

So, what would we call two subsets which are having no common elements.

- We call them as disjoint sets.