SET THEORY

❖ Equality Of Sets :

➔ Two sets are declared to be equal ***if and only if*** they contain ***exactly the same*** elements.

➔ In particular, it does not matter ***how the set is defined or denoted.***

➔ For example:
The set {1, 2, 3, 4} = {x | x is an integer where $x > 0$ and $x < 5$ }

= {x | x is a positive integer whose square is > 0 and < 25}

➔ Two sets are equal if they have the same elements
{1, 2, 3, 4, 5} = {5, 4, 3, 2, 1}

➔ Remember that order does not matter!
{1, 2, 3, 2, 4, 3, 2, 1} = {4, 3, 2, 1}

➔ Remember that duplicate elements do not matter!

➔ Two sets are not equal if they do not have the same elements
{1, 2, 3, 4, 5} ≠ {1, 2, 3, 4}