

1.2: The Language of Sets

Axiom of Extension: A set is completely determined by what its elements are - not the order in which they might be listed or the fact that some elements might be listed more than once. *Formally: Given any set A and any set B , if for every set X , X is a member of A if and only if X is a member of B , then A is equal to B .* [1]

Set-Roster $A = \{1, 2, 2, \dots\}$

Set-Builder $\{x \in S \mid P(x)\}$ – Set: S . Elements: x . Property: $P(x)$

Reference

[1] https://en.wikipedia.org/wiki/Axiom_of_extensionality