Cardinality of a set – number if elements in a set

Powerset – a set of all subsets of a set. P(set). Includes empty set

Empty set. A set with cardinality of 0

{1,2,3,4} = {4,4,3,2,1}: order and duplicates are irrelevant

{1,2,3} >= {1,2}: subset

{1,2,3} >= {1,2,3}: a set can be a subset of itself

A = {a,b,c} P(A) = {empty, {a}, {b}, {c}, {a,b} , {a,c}, {b,c}, {a,b,c}}

Natural numbers are integers starting from 0