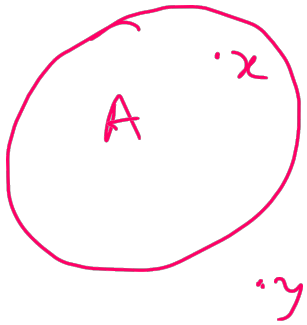
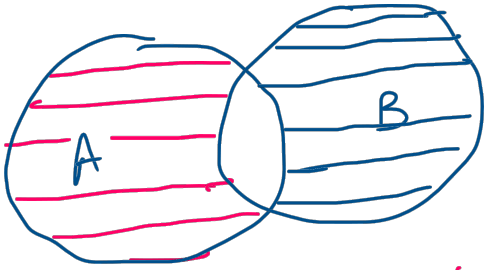
Set theory

Set = ? (collection of well defined objects)



$x \in A$

$y \notin A$



B - A

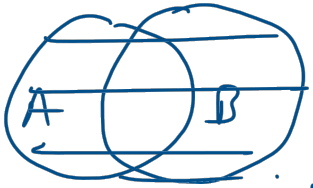
(B \ A)

$x \in B \wedge x \notin A$

A - B (A \ B)

Set difference

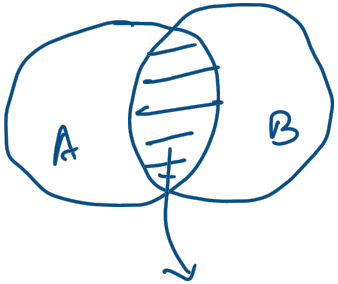
$x \in A \wedge x \notin B$



A ∪ B

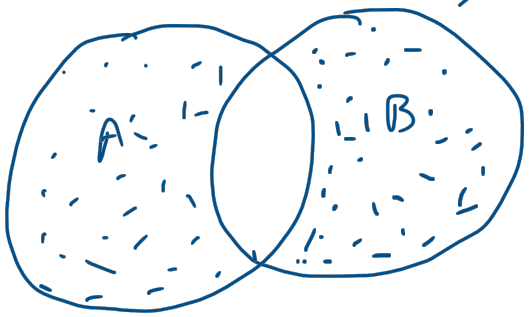
(Union)

$(x \in A \vee x \in B)$

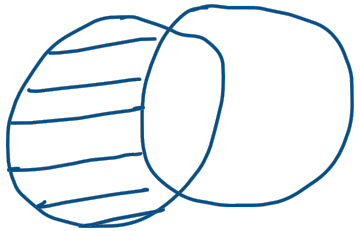


A ∩ B (intersection)

$(x \in A \wedge x \in B)$



→ Symmetric difference



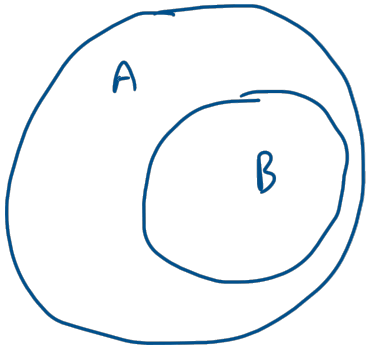
$(A - B) \cup (B - A)$

$(A \cup B) - (A \cap B)$

$(x \in A \wedge x \notin B) \vee (x \in B \wedge x \notin A)$

$(A \cap B)^c$

$A \cap B^c$



$B \subset A$

B → Subset

A → superset

$A \cap B = \phi$

disjoint sets