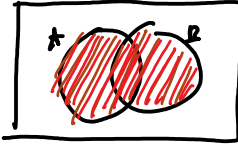


# Venn Diagrams

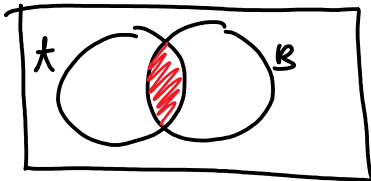
Tuesday, October 23, 2018 12:43 PM

$A \cup B$  = elements that are either in  $A$  or in  $B$  or both  
 = contains all the elements of  $A$  and perhaps more



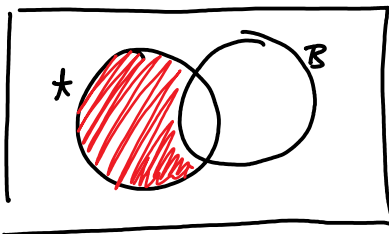
$A \cap B$  = elements in both  $A$  and  $B$   
 = shared elements

- cannot get bigger than  $A$
- cannot get bigger than  $B$



$A - B$  elements that are in  $A$  and not in  $B$

- cannot be bigger than  $A$
- cannot contain elements in  $B$



①  $A^c \cup B$  = elements in  $B$  or not in  $A$

~~Handwritten scribbles~~