

Tabla de Leyes de Álgebra de Conjuntos

Leyes conmutativas	$A \cup B = B \cup A$ $A \cap B = B \cap A$ $A \oplus B = B \oplus A$		
Leyes asociativas	$(A \cup B) \cup C = A \cup (B \cup C)$ $(A \cap B) \cap C = A \cap (B \cap C)$ $(A \oplus B) \oplus C = A \oplus (B \oplus C)$		
Leyes distributivas	$A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$ $A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$		
Leyes de idempotencia	$A \cup A = A$ $A \cap A = A$		
Leyes de identidad	$A \cup \emptyset = A$ $A \cap U = A$		
Leyes de dominación	$A \cup U = U$ $A \cap \emptyset = \emptyset$		
Leyes de complemento	$A' = U - A$ $A'' = A$ $U' = \emptyset$ $\emptyset' = U$ $A \cup A' = U$ $A \cap A' = \emptyset$	$\overline{A} = U - A$ $\overline{\overline{A}} = A$ $\overline{U} = \emptyset$ $\overline{\emptyset} = U$ $A \cup \overline{A} = U$ $A \cap \overline{A} = \emptyset$	Notaciones alternas: $A - B = A \setminus B$ $A \oplus B = A \Delta B$ $A' = \overline{A} = A^c$
Leyes de De Morgan	$(A \cup B)' = A' \cap B'$ $(A \cap B)' = A' \cup B'$ $A \cup B = (A' \cap B')'$ $A \cap B = (A' \cup B')'$	$\overline{A \cup B} = \overline{A} \cap \overline{B}$ $\overline{A \cap B} = \overline{A} \cup \overline{B}$ $A \cup B = \overline{\overline{A} \cap \overline{B}}$ $A \cap B = \overline{\overline{A} \cup \overline{B}}$	
Leyes de absorción	$A \cup (A \cap B) = A$ $A \cap (A \cup B) = A$		
Diferencia	$A - B = A \cap B'$	$A - B = A \cap \overline{B}$	
Diferencia simétrica	$A \oplus B = (A - B) \cup (B - A)$ $A \oplus B = (A \cup B) - (A \cap B)$		