PROPRIETÀ degli INSIEMI

$(A^c)^c = A$

$A \cap A = A$ $\qquad A \cup A = A$

$A \cap \phi = \phi$ $\qquad A \cup \phi = A$

$A \cap B = B \cap A$ proprietà simmetrica $\qquad A \cup B = B \cup A$

$A \cap B \subseteq A \cup B$

$A \cap B \subseteq A$

$A \cap B \subseteq B$

$A \subseteq A \cup B$

$B \subseteq A \cup B$

$(A \cap B) \cap C = A \cap (B \cap C)$ $\qquad (A \cup B) \cup C = A \cup (B \cup C)$

proprietà associativa

$A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$ propr. distributiva di $\cup$ risp a $\cap$

$A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$ " " di $\cap$ risp $\cup$

$(A \cap B)^c = A^c \cup B^c$) Leggi di DE MORGAN

$(A \cup B)^c = A^c \cap B^c$

$A \subseteq B \iff A \cap B = A$

$A \subseteq B \iff A \cup B = B$

$A \subseteq B \iff \mathcal{P}(A) \subseteq \mathcal{P}(B)$

$A \subseteq B \iff A \setminus B = \phi$

$A \setminus B = A \cap B^c$

$(A \setminus B) \cap (B \setminus A) = \phi$

$A \setminus (B \cap C) = (A \setminus B) \cup (A \setminus C)$

$A \setminus (B \cup C) = (A \setminus B) \cap (A \setminus C)$

$(A \cup B) \setminus C = (A \setminus C) \cup (B \setminus C)$

$(A \cap B) \setminus C = (A \setminus C) \cap (B \setminus C)$

$A \setminus (B \setminus C) = (A \setminus B) \cup (A \cap C)$