The Stall Seat Journal

Having trouble keeping up with notes in class?

Try taking notes using operators and quantifiers!!

Symbol	Name	Explanation
⇒	Logical implication	A ⇒B (If A is True, then B is True)
⇔	Double implication	A ⇔ B (If A or B are True, the other must be True)
¬ A	Logical negation	¬ A (If A is True, ¬ A is False; If A is False, ¬ A is True)
∧	Logical conjunction	A ∧ B (True when both A and B are True) "AND"
∨	Logical disjunction	A ∨ B (True when either A or B are True) "OR"
∀	"For every"	∀x "For every element x"
∃	"At least one"	∃x "There exists some x"
∈	Set membership	x ∈ S "Element x is a member of set S"
∉	Set non-membership	x ∉ S "Element x is not a member of set S"
⊆	Is a subset of	A⊆B "All elements in set A are in set B"
=	Set equality	A = B "Sets A and B are the same (subsets of each other)"
∪	Set union	A ∪ B (The set of all elements in sets A OR B)
∩	Set intersection	A ∩ B (The set of all elements in sest A AND B)
-	Set difference	A – B (The set of all elements in A but not B)
A^c OR A'	Set complement	A^c OR A' (The set of all elements in universe not in A)

∀element ∈period table . has a unique Atomic Number

"Every element in the period table has a unique Atomic number."

Sweden ∉ NATO

"Sweden is not a member of NATO."

(n < 30) ∧ (distribution ¬normal) ⇒ t-score

"If the sample size is less than 30 and the population isn't normally distributed, then the t-score must be used"

Vasoconstriction ⇔ ¬Bronchoconstriction

"Vasoconstriction and bronchoconstriction do not occur simultaneously"

∀x ∈composite numbers . ∃ n, a ∈ (Z – 1 – x) . n*a = x

"For every composite number there exists some other whole number that it is divisible by"

P(A ∧ B) = 0 ⇒ mutual exclusivity

"If the probability of both events A and B taking place is zero, then events A and B are mutually exclusive"