

Notation

Logical Symbols

\mathbb{T} is read as "True"

\mathbb{F} is read as "False"

\Rightarrow is read as "implies" or "If...then..." or "If... then it is necessarily true that..."

\neg is read as "not"

\wedge is read as "logical and"

\oplus is read as "either ...or..."

$a \oplus b$ is read as "either a or b"

$=$ is read as "is equal to"

\doteq is read as *is*

$\mathbb{T} \doteq s$ is read as "s is True"

$:$ is read as "satisfying the condition"

Ω is read as "the Universal Set"

\emptyset is read as "the Empty Set"

a_i often denotes a "boolean statement"

b_i often denotes a "boolean statement"

Set Theory Symbols

S denotes a "set"

\in is read as "in"

s often denotes an element (can be replaced with any lowercase symbol)

\exists is read as "there exists"

\nexists is read as "there does not exist"

\forall is read as "for all"

\cup is read as "union" (sometimes read as "and")

$,$ is read as "and" (sometimes used as shorthand for \cup)

\cap is read as "intersection"

$s_i \in S$ is read as "element s sub i in set S "

Function Symbols

x_i denotes "inputs"

y_i denotes "outputs"

$f[x_1, x_2, \dots, x_n] \rightarrow y_1, y_2, \dots, y_n$ is read as "function f with inputs x_1, x_2, \dots, x_n
outputs y_1, y_2, \dots, y_n "

Computation Symbols

\leftarrow is read as "assignment"

Mathematical Symbols

$=$ is read as "equals"

$+$ is read as "plus"

\perp is read as "orthogonal"