$\wedge$	The AND connective
$\vee$	The OR connective
$\sim$,$\neg$	The NEGATION or NOT connective
$\in$	Belongs to or is an element of
$\notin$	Does not belong to or is not an element of
$\emptyset$	The empty or null set
$\setminus$	Set minus
$\forall$	"For every" or "for all"
$\exists$	There exists
$\Rightarrow$	The CONDITIONAL or "If-then" statement
$\Leftrightarrow$	The BICONDITIONAL or "If and only if" statement
$A \subseteq B$, $A \subset B$	A is a subset of B
A^c	The compliment of the set A
$A \cup B$	The union of A and B
$A \cap B$	The intersection of A and B
$A \times B$	The Cartesian product of A and B
$A \Delta B$	The symmetric difference of A and B
$P(A)$	The power set of A
$\overline{A}$	The closure of A
A°	The interior of A
∂A	The boundary of A
$A \sim B$	A and B have the same cardinality
$\aleph_0$	The cardinality of $\mathbb{N}$, read "Aleph null"
$\aleph_1$	The cardinality of $\mathbb{R}$ ($2^{\aleph_0}$), read "Aleph one"
$\mathbf{C}$	The set of continuous functions
$\mathbf{C}^1$	The set of differentiable functions
$\mathbf{C}^2$	The set of twice differentiable functions
$\mathbf{C}^\infty$	The set of infinitely differentiable functions
C	The Cantor set
F_σ	A countable union of closed sets
G_δ	A countable intersection of open sets
$\mathbb{C}$	The complex numbers
iff	Abbreviation for "if and only if"
$f[A]$	The image of the set A under f
$f^{-1}[A]$	The inverse image of the set A under f
$f \circ g$	The composition of f and g
$f\|A$	The restriction of f to A
$\mathbb{I}$	The irrational numbers
$\mathbb{N}$	The natural numbers $\{1, 2, 3, \ldots\}$
$\mathbb{Q}$	The rational numbers
$\mathbb{R}$	The real numbers: $(-\infty, \infty)$
$\mathbb{R}^+$	The positive real numbers: $(0, \infty)$
sup	The supremum or least upper bound
inf	The infimum or greatest lower bound
$\mathcal{U}$	The universal set
$\mathbb{Z}$	The integers $\{\ldots, -2, -1, 0, 1, 2, \ldots\}$