

Notations and terms commonly used in mathematics (in addition to those defined in the textbook)

chapters 1-7, last revision: 3/22/06

Notation/term used in the book	Other common notations/terms	Meaning/remarks
\mathbb{N}	\mathbb{Z}_+ or \mathbb{Z}^+	$\{1, 2, 3, \dots\}$
	\mathbb{N}, \mathbb{Z}_+ or \mathbb{Z}^+	$\{0, 1, 2, 3, \dots\}$
$S - T$	$S \setminus T$	difference of sets
\overline{S}	S^c	complement of a set S
statement	proposition	(in logic), e.g. “ $5+3=8$ ”
open sentence	propositional function, predicate	(in logic), e.g. “ $x+3=8$ ”
\sim	\neg	negation
	\oplus	exclusive or
\Rightarrow	\rightarrow	implication
\Leftrightarrow	\leftrightarrow	biconditional
	\Leftrightarrow, \equiv	logical equivalence
	$\exists!$	there exists a unique
$xRy, (x, y) \in R$ x is related to y	$x \sim y$ x is equivalent to y	if R is an equivalence relation