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

chapters 1-7

Notation/term used in the book	Ohter common notations/terms	Meaning/remarks
$\mathbb{N}$	$\mathbb{Z}_+$ or $\mathbb{Z}^+$	$\{1, 2, 3, \ldots\}$
	$\mathbb{N}$, $\mathbb{Z}_+$ or $\mathbb{Z}^+$	$\{0, 1, 2, 3, \ldots\}$
$S - T$	$S \backslash T$	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