

## Notational Note

Throughout this book we adopt the following notational conventions.

Symbol	Meaning
$\vee$	join
$\wedge$	meet
$\cup$	union
$\cap$	intersection
$\emptyset$	empty set
$\leq$	less than or equal to
$<$	strictly less than
$\nless$	is not less than or equal to
$\geq$	grater than or equal to
$>$	strictly grater than
$\exists$	there exist
$\nexists$	there does not exist
$\forall$	for every
$\in$	is a member of
$\notin$	is not a member of
$\subseteq$	is a subset of
$\subset$	is a proper subset of
$\nsubseteq$	is not a subset of
$\supseteq$	is a super set of
$\therefore$	since
$\Rightarrow$	it implies
$\Leftrightarrow$	it implies & is implied by
$\cong$	lattice isomorphism
$\Sigma$	summation
$\mathbb{Z}^+$	the set of all positive integers

**Abbreviations** : s. t. - such that, i. e. - that is, e. g. - for example.  
iff - if and only if.

**Important** : 1) It is to note that, whenever brackets are not introduced the operations viz., ":" ( residuation ) & "." ( multiplication ) are to be performed first and then the operations viz., "∨" ( join ) & "∧" ( meet ) will be performed.

2) The encircled numbers (①,②,etc.) appearing in a proof of a certain result play their role in that result only & have no connection with other results.

3) The number within the square brackets is to indicate the number of the reference. These references in the list are listed alphabetically..