Greek characters

Name	Symbol	Typical use(s)
alpha	α	angle, constant
beta	β	angle, constant
gamma	γ	angle, constant
delta	δ	limit definition
epsilon	ϵ or ε	limit definition
theta	θ or ϑ	angle
pi	π or π	circular constant
phi	ϕ or φ	angle, constant

Named sets

empty set	Ø
real numbers	\mathbf{R}
ordered pairs	${f R}^2$

integers	\mathbf{Z}
positive integers	$\mathbf{Z}_{>0}$
positive reals	$\mathbf{R}_{>0}$

Set symbols

Meaning	Symbol
is a member	€
subset	\subset
intersection	\cap

Meaning	Symbol
union	U
complement	superscript ^C
set minus	\

Logic symbols

Meaning	Symbol
negation	_
and	\wedge
or	V
implies	\implies

Meaning	Symbol
equivalent	=
iff	\iff
for all	\forall
there exists	∃

Function notation

dom(F)	domain of function F
range(F)	range of function F
C_A	set of continuous functions on set A
C_A^1	set of differentiable functions on set A
$A \rightarrow B$	set of functions from A to B

Revised January 11, 2023. Barton Willis is the author of this work. This work is licensed under Attribution 4.0 International (CC BY 4.0) . For the current version of this document, visit

Triangle inequalities

 $|x+y| \le |x| + |y|$ $||x| - |y|| \le |x-y|$

For all $x, y \in \mathbf{C}$, we have