

Notation and Symbols

Operators

=	equal to
+	add, or
-	subtract, negate, not
/	divide
	divides
\in	element of
\cap	intersection
\cup	union
\setminus	set subtraction
\subseteq	subset
\subset	proper subset
\wedge	and
\vee	or

Data Types and Representation

Boolean

$$\mathbb{B}$$

Numeric

\mathbb{N}	positive integers
\mathbb{N}_0	positive integers plus zero
\mathbb{Z}	integers
\mathbb{Q}	rational numbers
\mathbb{R}	real numbers
\mathbb{C}	complex numbers

\mathbb{R}^2	real plane
\mathbb{R}^3	3-space

The set of irrational numbers is given by: $\mathbb{R} \setminus \mathbb{Q}$

$$\mathbb{N} \subset \mathbb{N}_0 \subset \mathbb{Z} \subset \mathbb{Q} \subset \mathbb{R} \subset \mathbb{C}$$
$$\mathbb{R} \subset \mathbb{R}^2 \subset \mathbb{R}^3$$

Numeric Symbols

m, n	integer variable
a, b, c	arbitrary constant
x, y	real variable
\mathbf{x}, \mathbf{v}	vector variable
\mathbf{A}, \mathbf{B}	matrix
z, s	complex variable
f, g	scalar valued function
\mathbf{f}, \mathbf{g}	vector valued function
$\mathbf{i}, \mathbf{j}, \mathbf{k}$	unit basis vectors

Greek

α	A	alpha
β	B	beta
γ	Γ	gamma
δ	Δ	delta
ϵ, ε	E	epsilon
ζ	Z	zeta
η	H	eta
θ, ϑ	Θ	theta
ι	I	iota
κ	K	kappa
λ	Λ	lambda
μ	M	mu
ν	N	nu
ξ	Ξ	xi
σ	O	omicron
π, ϖ	Π	pi
ρ, ϱ	P	rho
σ, ς	Σ	sigma
τ	T	tau
ν	Υ	upsilon
ϕ, φ	Φ	phi
χ	X	chi
ψ	Ψ	psi
ω	Ω	omega