Math-Greek alphabet

Hello. *This shows how my pamphlets* (Prof. King) *typeset the Greek letters, and how I write them on the blackboard.*

alpha	α	A	
beta	β	B	
gamma	γ	Γ	*My blackboard lowercase-gamma has a loop at the bottom.*
delta	δ	Δ	*Different from* ∇ *, nabla.* See Wikipedia Nabla.
epsilon	ε	E	*Different from* $\in$,"is an element of", *and* $\ni$,"owns".
zeta	ζ	Z	*My blackboard lowercase-zeta, at the bottom, curves all the way back left.*
eta	η	H	
theta	θ	Θ	*My blackboard lowercase-theta is closer to* ϑ .
iota	ι	I	
kappa	κ	K	
lambda	λ	Λ	
mu	μ	M	*Pronounced as* "me-you", *slurred together —like a cat with an accent.*
nu	ν	N	*Pronounced as* "new". *Different from Roman* v, *and from Greek upsilon* υ.
xi	ξ	Ξ	*I pronounce as in the 2nd syllable of* "pixie".
omicron	o	O	*Different from* 0, *zero. Different from* $\varnothing$, *the empty set.*
pi	π	Π	*Diff. from the Product* $\prod$ *operator, e.g* $\prod_{n=1}^{5} \Pi(n)$, *or possibly* $\prod_{1}^{5} \Pi(n)$.
rho	ρ	P	
sigma	σ	Σ	*Different from the Sum* $\sum$ *operator, e.g* $\sum_{k=1}^{5} \Sigma(k)$, *or* $\sum_{k=1}^{5} \Sigma(k)$.
tau	τ	T	*Pronounced as the first syllable in* "towel".
upsilon	υ	Υ	*Pronounced* "oops-salon" *—as if you're startled by a hairdresser.*
phi	φ	Φ	*I pronounce as* "fee". *Different from* $\varnothing$, *the empty set.*
chi	χ	X	*I pronounce as the first syllable in* "kayak", *the boat.*
psi	ψ	Ψ	*Remove the* "ti" *from* "tipsy"; *that's how I pronounce "psi".*
omega	ω	Ω	*Different from Roman* w.

Alignment: αA βB $\gamma\Gamma$ $\delta\Delta$ εE ζZ ηH $\theta\Theta$ ιI κK $\lambda\Lambda$ μM νN $\xi\Xi$ oO $\pi\Pi$ ρP $\sigma\Sigma$ τT $\upsilon\Upsilon$ $\varphi\Phi$ χX $\psi\Psi$ $\omega\Omega$

Standard sets. *I use* $\mathbb{Z}$ $\mathbb{Q}$ $\mathbb{R}$ $\mathbb{C}$ $\mathbb{A}$ *for the: Integers Rationals Reals Complex-numbers Algebraic-numbers.*

Special symbols. *My typeset pamphlets use different fonts* (usually boldface) *for certain constant symbols.*

No	*Yes!*	*Meaning:*
π	$\boldsymbol{\pi}$	*The ratio of circle's circumference to its diameter.*
e	e	*The base of* log, *the* (natural) *logarithm fnc. So* $\log(\mathsf{e}) = 1$.
γ	$\boldsymbol{\gamma}$	*Euler's constant:* $\boldsymbol{\gamma} = \lim_{n\to\infty}[\mathcal{H}_{n-1} - \log(n)]$, *where* $\mathcal{H}_n := \sum_{k=1}^{n} 1/k$.
λ	$\boldsymbol{\lambda}$	*The Golden Ratio,* $\boldsymbol{\lambda} = \frac{1+\sqrt{5}}{2}$.
p, q	$\boldsymbol{p}, \boldsymbol{q}$	*Generic prime numbers.*
τ	$\boldsymbol{\tau}$	*The number-of-divisors fnc:* $\boldsymbol{\tau}(7) = 2$.
σ	$\boldsymbol{\sigma}$	*The sum-of-divisors fnc:* $\boldsymbol{\sigma}(7) = 8$.
φ	$\boldsymbol{\varphi}$	*The Euler phi fnc:* $\boldsymbol{\varphi}(7) = 6$.
μ	$\boldsymbol{\mu}$	*The Möbius fnc:* $\boldsymbol{\mu}(30) = -1$.
1	$\mathbf{1}$	*Kronecker fnc:* $\mathbf{1}(true) = 1$, $\mathbf{1}(false) = 0$. *The indicator fnc of a set:* $\mathbf{1}_S()$.
Γ	$\boldsymbol{\Gamma}$	*Gamma fnc:* $\boldsymbol{\Gamma}(\omega) := \int_0^\infty t^{\omega-1}\mathsf{e}^{-t}\,\mathrm{d}t$.
ζ	$\boldsymbol{\zeta}$	*The Riemann zeta fnc:* $\boldsymbol{\zeta}(s) := \sum_{n=1}^{\infty} 1/n^s$.
θ, ϑ	$\boldsymbol{\vartheta}$	*The Chebyshev theta fnc:* $\boldsymbol{\vartheta}(x) := \sum_{p:\ p\leqslant x} \log(p)$.
L, l, ℓ	$\mathbb{L}, \boldsymbol{\ell}$	*Banach spaces* $\mathbb{L}_p$ *and* $\boldsymbol{\ell}_p$.