

# Global Notational Conventions

Objects of type 0:

$a, b, \dots, e, i, j, \dots, w$

natural numbers = elements of  $\omega$

Objects of type 1:

$\alpha, \beta, \gamma, \delta, \varepsilon$

$f, g, h, E, F, \dots, K$

$A, B, C, D, M, N, O, W$

$P, Q, \dots, V$

total unary functions  $\omega \rightarrow \omega$  = elements of  ${}^\omega\omega$

partial functions  ${}^k\omega \rightarrow \omega$

sets of natural numbers = subsets of  $\omega$

$k$ -ary relations on  $\omega$  = subsets of  ${}^k\omega$

Objects of type 2:

$E, F, \dots, K$

$A, B, C, D, M, N, W$

$P, Q, \dots, V$

partial functionals  ${}^{k,l}\omega \rightarrow \omega$

sets of (total unary) functions = subsets of  ${}^\omega\omega$

$(k, l)$ -ary relations = subsets of  ${}^{k,l}\omega$

Objects of type 3:

$E, F, \dots, K$

$A, B, C, D, M, N, W$

$P, Q, \dots, V$

partial functionals  ${}^{k,l,l'}\omega \rightarrow \omega$

sets of total unary functionals = subsets of  ${}^{(\omega)}\omega$

$(k, l, l')$ -ary relations = subsets of  ${}^{k,l,l'}\omega$

Objects of type 4:

$\mathcal{E}, \mathcal{F}, \dots, \mathcal{H}$

$\mathcal{P}, \mathcal{Q}, \dots, \mathcal{V}$

partial functionals  ${}^{k,l,l',l''}\omega \rightarrow \omega$

$(k, l, l', l'')$ -ary relations = subsets of  ${}^{k,l,l',l''}\omega$

Other:

$\kappa, \lambda, \mu, \nu, \pi, \rho, \sigma, \tau, \upsilon$

$\Gamma, \Lambda$

$\mathcal{L}$

$\mathcal{T}$

$\mathfrak{A}, \mathfrak{B}, \mathfrak{C}$

$\mathfrak{M}, \mathfrak{N}, \mathfrak{U}$

$x, y, z$

$X, Y, Z$

$\varphi, \psi, \chi, \theta$

ordinal numbers

inductive operators

formal language

formal theory

formulas of a formal language

structures, models

arbitrary objects

arbitrary sets

arbitrary functions

The last three categories are often subject to local conventions

In most instances a bold-face letter denotes a finite sequence of objects of the type denoted by the light-face letter, Exceptions:  $\Sigma, \Pi, \Delta, \nabla, \kappa, \omega, [-]$ .