

*54·43. $\vdash \therefore \alpha, \beta \in 1. \supset : \alpha \cap \beta = \Lambda. \equiv . \alpha \cup \beta \in 2$

Dem.

$\vdash . *54·26 . \supset \vdash \therefore \alpha = t'x . \beta = t'y . \supset : \alpha \cup \beta \in 2 . \equiv . x \neq y .$

[*51·231]

$\equiv . t'x \cap t'y = \Lambda .$

[*13·12]

$\equiv . \alpha \cap \beta = \Lambda \quad (1)$

$\vdash . (1) . *11·11·35 . \supset$

$\vdash \therefore (\exists x, y) . \alpha = t'x . \beta = t'y . \supset : \alpha \cup \beta \in 2 . \equiv . \alpha \cap \beta = \Lambda \quad (2)$

$\vdash . (2) . *11·54 . *52·1 . \supset \vdash . \text{Prop}$

From this proposition it will follow, when arithmetical addition has been defined, that $1 + 1 = 2$.