

$$\text{II } (2) \quad F = (\forall x)(\exists y)((\alpha(x,z) \Rightarrow \alpha(x,y)) \Rightarrow \alpha(z,a)) \\ \wedge (\exists z)\alpha(x, f(y,z)).$$

$$D = P(A), \quad \alpha := , \quad f: \cap, \quad a: \emptyset$$

$$F = (\forall x)(\exists y)[(x=z \Rightarrow x=y) \Rightarrow z=\emptyset \wedge (\exists z) x=y \cap z]$$

$$\Leftrightarrow (\forall x)(\exists y)[(x \neq z \vee x=y) \Rightarrow z=\emptyset \wedge x \subseteq y]$$

$$\Leftrightarrow (\forall x)(\exists y)[(x=z \wedge x \neq y) \vee z=\emptyset \wedge x \subseteq y] \quad 5$$

$$\Leftrightarrow (\forall x)(\exists y)[(x=z \wedge \underbrace{x \neq y \wedge x \subseteq y}_{x \subset y}) \vee (z=\emptyset \wedge x \subseteq y)]$$

$$\Leftrightarrow (\forall x) \left[\underbrace{x=z \wedge (\exists y) x \subset y}_{x \neq A} \vee z=\emptyset \wedge \underbrace{(\exists y) x \subseteq y}_T \right]$$

$$\Leftrightarrow (\forall x) [(x=z \wedge x \neq A) \vee z=\emptyset]$$

$$\Leftrightarrow z=\emptyset \vee \underbrace{[(\forall x) x=z \wedge (\forall x) x \neq A]}_T$$

$$\Leftrightarrow z=\emptyset$$

$$\vartheta(F) = \begin{cases} 1, & z=\emptyset \\ 0, & \text{otherwise} \end{cases} \quad 5$$

$$\vartheta(F) = 1 \quad \text{za } \vartheta(z) \neq \emptyset$$

$$\vartheta(F) = 0 \quad \text{za } \vartheta(z) = A$$