

t18_valued_1 (TM-
MJZNca9WsQLzay7Lq8h79VKksukLSPrg9)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k54_valued_1 : \iota \Rightarrow \iota$ be given. Let $k17_complex1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$k17_complex1\ k6_numbers = k6_numbers \quad (1)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1\ X0) \wedge ((v1_funct_1\ X0) \wedge (v1_valued_0\ X0))) \Rightarrow \\ ((v1_relat_1\ (k54_valued_1\ X0)) \wedge ((v1_funct_1\ (k54_valued_1\ X0)) \wedge (v3_valued_0\ (k54_valued_1\ X0)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1\ X0) \wedge (v1_funct_1\ X0)) \Rightarrow (\forall X1. \forall X2. \\ ((X1 \in k9_xtuple_0\ X0) \Rightarrow ((X2 = k1_funct_1\ X0\ X1) \Leftrightarrow (k4_tarski\ X1\ X2 \in X0))) \wedge ((\neg X1 \in k9_xtuple_0\ X0) \Rightarrow ((X2 = k1_funct_1\ X0\ X1) \Leftrightarrow (X2 = k1_xboole_0)))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1\ X0) \wedge ((v1_funct_1\ X0) \wedge (v1_valued_0\ X0))) \Rightarrow \\ (\forall X1.((v1_relat_1\ X1) \wedge ((v1_funct_1\ X1) \wedge (v3_valued_0\ X1))) \Rightarrow ((X1 = k54_valued_1\ X0) \Leftrightarrow ((k9_xtuple_0\ X1 = k9_xtuple_0\ X0) \wedge \\ (\forall X2.(X2 \in k9_xtuple_0\ X1) \Rightarrow (k1_funct_1\ X1\ X2 = k17_complex1\ (k1_funct_1\ X0\ X2)))))) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_relat_1\ X0) \wedge ((v1_funct_1\ X0) \wedge (v1_valued_0\ X0))) \Rightarrow \\ (\forall X1.k1_funct_1\ (k54_valued_1\ X0)\ X1 = k17_complex1\ (k1_funct_1\ X0\ X1)) \end{aligned}$$