

t35_yellow18

(TMYb6ZRP4hk3HHZk7d93QomjYD2F1HbZxKP)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_altcat_1 : \iota \Rightarrow o$ be given. Let $v11_altcat_1 : \iota \Rightarrow o$ be given. Let $v12_altcat_1 : \iota \Rightarrow o$ be given. Let $v2_yellow18 : \iota \Rightarrow o$ be given. Let $l2_altcat_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_altcat_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k3_yellow18 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_altcat_1 X0) \wedge ((v11_altcat_1 \\ X0) \wedge ((v12_altcat_1 X0) \wedge (l2_altcat_1 X0)))))) \Rightarrow ((v2_yellow18 \\ X0) \Leftrightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (r1_tarski (k1_altcat_1 X0 \\ X1 X2) (k1_funct_2 (k3_yellow18 X0 X1) (k3_yellow18 X0 X2))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(X2 = k1_funct_2 X0 X1) \Leftrightarrow (\forall X3. \\ (X3 \in X2) \Leftrightarrow (\exists X4.((v1_relat_1 X4) \wedge (v1_funct_1 X4)) \wedge ((X3 = \\ X4) \wedge ((k9_xtuple_0 X4 = X0) \wedge (r1_tarski (k10_xtuple_0 X4) X1)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0 X0) \Rightarrow ((m1_subset_1 X1 X0) \Leftrightarrow \\ (X1 \in X0))) \wedge ((v1_xboole_0 X0) \Rightarrow ((m1_subset_1 X1 X0) \Leftrightarrow (v1_xboole_0 \\ X1))) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_altcat_1 X0) \wedge ((v11_altcat_1 \\ & X0) \wedge ((v12_altcat_1 X0) \wedge ((v2_yellow18 X0) \wedge (l2_altcat_1 X0)))))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 X0)) \Rightarrow ((k1_altcat_1 X0 X1 X2 \neq k1_xboole_0) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 (k1_altcat_1 X0 X1 X2)) \Rightarrow ((k9_xtuple_0 X3 = k3_yellow18 \\ & X0 X1) \wedge (r1_tarski (k10_xtuple_0 X3) (k3_yellow18 X0 X2))))))) \end{aligned}$$