

t32_yellow18

(TMH2P9ZVLYmzvNH6Mgdct6PHBPnSSo4Tm2s)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k7_altcat_1 : \iota \Rightarrow \iota$ be given. Let $k3_yellow18 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_altcat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_partfun1 : \iota \Rightarrow \iota$ be given. Let $k4_relat_1 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_altcat_1 : \iota \Rightarrow o$ be given. Let $v6_altcat_1 : \iota \Rightarrow o$ be given. Let $v10_altcat_1 : \iota \Rightarrow o$ be given. Let $v11_altcat_1 : \iota \Rightarrow o$ be given. Let $v12_altcat_1 : \iota \Rightarrow o$ be given. Let $l2_altcat_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 (k7_altcat_1 X0))) \Rightarrow (k8_altcat_1 (k7_altcat_1 X0) X1 = k6_partfun1 X1)) \quad (1)$$

Assume the following.

$$\forall X0. k6_partfun1 X0 = k4_relat_1 X0 \quad (2)$$

Assume the following.

$$\forall X0. k9_xtuple_0 (k4_relat_1 X0) = X0 \quad (3)$$

Assume the following.

$$\forall X0. (\neg v1_xboole_0 X0) \Rightarrow ((\neg v2_struct_0 (k7_altcat_1 X0)) \wedge ((v2_altcat_1 (k7_altcat_1 X0)) \wedge ((v6_altcat_1 (k7_altcat_1 X0)) \wedge ((v10_altcat_1 (k7_altcat_1 X0)) \wedge ((v11_altcat_1 (k7_altcat_1 X0)) \wedge (v12_altcat_1 (k7_altcat_1 X0)))))))) \quad (4)$$

Assume the following.

$$\forall X0. (\neg v1_xboole_0 X0) \Rightarrow ((\neg v2_struct_0 (k7_altcat_1 X0)) \wedge ((v6_altcat_1 (k7_altcat_1 X0)) \wedge ((v10_altcat_1 (k7_altcat_1 X0)) \wedge (l2_altcat_1 (k7_altcat_1 X0)))))) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_altcat_1 X0) \wedge ((v11_altcat_1 \\ X0) \wedge ((v12_altcat_1 X0) \wedge (l2_altcat_1 X0)))))) \Rightarrow (\forall X1. (m1_subset_1 \\ X1 (u1_struct_0 X0)) \Rightarrow (k3_yellow18 X0 X1 = k9_xtuple_0 (k8_altcat_1 \\ X0 X1))) \end{aligned} \tag{6}$$

Theorem 1

$$\forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\ (k7_altcat_1 X0))) \Rightarrow (k3_yellow18 (k7_altcat_1 X0) X1 = X1))$$