

t10_fomodel1 (TMWwbzFD- fAZuqe2BSNdrfvvgKY4vFF7bzxUy)

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Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v11_fomodel1 : \iota \Rightarrow o$ be given. Let $l1_fomodel1 : \iota \Rightarrow o$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_fomodel1 : \iota \Rightarrow \iota$ be given. Let $k16_fomodel1 : \iota \Rightarrow \iota$ be given. Let $k3_fomodel1 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k8_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_fomodel1 : \iota \Rightarrow \iota$ be given. Let $u1_fomodel1 : \iota \Rightarrow \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $u3_struct_0 : \iota \Rightarrow \iota$ be given. Let $k4_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow (k8_relat_1 X2 (k6_subset_1 X0 X1) = k6_subset_1 (k8_relat_1 X2 X0) (k8_relat_1 X2 X1)) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (k8_relset_1 X0 X1 X2 X3 = k8_relat_1 X2 X3) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (k7_subset_1 X0 X1 X2 = k4_xboole_0 X1 X2) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (4)$$

Assume the following.

$$\forall X0.((\neg v6_struct_0 X0) \wedge ((v11_fomodel1 X0) \wedge (l1_fomodel1 X0))) \Rightarrow (k16_fomodel1 X0 = k2_fomodel1 X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.v1_relat_1 (k2_zfmisc_1 X0 X1) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_fomodel1 X0) \Rightarrow & ((v1_funct_1 (u1_fomodel1 X0)) \wedge \\ & ((v1_funct_2 (u1_fomodel1 X0) (k6_subset_1 (u1_struct_0 X0) (\\ & k1_tarski (u3_struct_0 X0))) k4_numbers) \wedge (m1_subset_1 (u1_fomodel1 \\ & X0) (k1_zfmisc_1 (k2_zfmisc_1 (k6_subset_1 (u1_struct_0 X0) (\\ & k1_tarski (u3_struct_0 X0))) k4_numbers)))))) \end{aligned} \quad (7)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_fomodel1 X0) \Rightarrow & (k5_fomodel1 X0 = k8_relset_1 (k6_subset_1 \\ & (u1_struct_0 X0) (k1_tarski (u3_struct_0 X0))) k4_numbers (u1_fomodel1 \\ & X0) k5_numbers) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_fomodel1 X0) \Rightarrow & (k3_fomodel1 X0 = k8_relset_1 (k6_subset_1 \\ & (u1_struct_0 X0) (k1_tarski (u3_struct_0 X0))) k4_numbers (u1_fomodel1 \\ & X0) (k7_subset_1 k1_numbers k5_numbers (k6_domain_1 k5_numbers \\ & k6_numbers))) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_fomodel1 X0) \Rightarrow & (k2_fomodel1 X0 = k8_relset_1 (k6_subset_1 \\ & (u1_struct_0 X0) (k1_tarski (u3_struct_0 X0))) k4_numbers (u1_fomodel1 \\ & X0) (k6_domain_1 k5_numbers k6_numbers)) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_relat_1 X1)) \quad (12)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v6_struct_0 X0) \wedge & ((v11_fomodel1 X0) \wedge (l1_fomodel1 \\ & X0))) \Rightarrow (k6_subset_1 (k5_fomodel1 X0) (k16_fomodel1 X0) = k3_fomodel1 \\ & X0) \end{aligned}$$