

t12_dtconstr
(TMVoMQ2631imxvvFqmGUcdD48HDmG8iWXco)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_dtconstr : \iota \Rightarrow \iota$ be given. Let $k5_dtconstr : \iota$ be given. Let $k12_dtconstr : \iota$ be given. Let $k8_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k14_dtconstr : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0 : \iota \Rightarrow o. ((X0 \ k6_numbers) \wedge (\forall X1. (m2_subset_1 \\ & X1 \ k1_numbers \ k5_numbers) \Rightarrow ((X0 \ X1) \Rightarrow (X0 \ (k2_nat_1 \ X1 \ np_1)))))) \Rightarrow \\ & (\forall X1. (m2_subset_1 \ X1 \ k1_numbers \ k5_numbers) \Rightarrow (X0 \ X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 \ X0) \wedge ((\neg v1_xboole_0 \ X1) \wedge \\ & (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ & X2 \ X0 \ X1) \Leftrightarrow (m1_subset_1 \ X2 \ X1)) \end{aligned} \quad (2)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 \ X0 \ k5_numbers) \Rightarrow ((X0 = k3_funct_2 \ (k4_dtconstr \\ & k5_dtconstr) \ k5_numbers \ k12_dtconstr \ (k8_nat_1 \ (k4_dtconstr \\ & k5_dtconstr) \ k14_dtconstr \ X0)) \Rightarrow (k2_nat_1 \ X0 \ np_1 = k3_funct_2 \\ & (k4_dtconstr \ k5_dtconstr) \ k5_numbers \ k12_dtconstr \ (k8_nat_1 \\ & (k4_dtconstr \ k5_dtconstr) \ k14_dtconstr \ (k2_nat_1 \ X0 \ np_1)))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & k6_numbers = k3_funct_2 \ (k4_dtconstr \ k5_dtconstr) \ k5_numbers \\ & k12_dtconstr \ (k8_nat_1 \ (k4_dtconstr \ k5_dtconstr) \ k14_dtconstr \\ & k6_numbers) \end{aligned} \quad (5)$$

Assume the following.

$$(\neg v1_xboole_0 \ k4_ordinal1) \wedge (v3_ordinal1 \ k4_ordinal1) \quad (6)$$

Assume the following.

$$m1_subset_1 \ k5_numbers \ (k1_zfmisc_1 \ k1_numbers) \quad (7)$$

Assume the following.

$$\forall X0.(v1_xboole_0 \ X0) \Rightarrow (\forall X1.(m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0)) \Rightarrow (v1_xboole_0 \ X1)) \quad (8)$$

Theorem 1

$$\forall X0.(m1_subset_1 \ X0 \ k5_numbers) \Rightarrow (X0 = k3_funct_2 \ (k4_dtconstr \ k5_dtconstr) \ k5_numbers \ k12_dtconstr \ (k8_nat_1 \ (k4_dtconstr \ k5_dtconstr) \ k14_dtconstr \ X0))$$