

t7_orders_3 (TM-
TaNg2rGukbr3YFh6cTFC98QHVEuRC2N9z)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $k6_partfun1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_orders_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $k1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_orders_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_struct_0 : \iota \Rightarrow \iota$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 X0 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))))) \Rightarrow (X1 \in k1_funct_2 X0 X0) \quad (1)$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (v5_orders_3 (k3_struct_0 X0) X0 X0) \quad (2)$$

Assume the following.

$$\forall X0. (l1_orders_2 X0) \Rightarrow (l1_struct_0 X0) \quad (3)$$

Assume the following.

$$\forall X0. (l1_struct_0 X0) \Rightarrow ((v1_funct_1 (k3_struct_0 X0)) \wedge ((v1_funct_2 (k3_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0)) \wedge (m1_subset_1 (k3_struct_0 X0) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))))) \quad (4)$$

Assume the following.

$$\forall X0. (l1_orders_2 X0) \Rightarrow (\forall X1. (l1_orders_2 X1) \Rightarrow (\forall X2. (X2 = k1_orders_3 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow (\exists X4. ((v1_funct_1 X4) \wedge ((v1_funct_2 X4 (u1_struct_0 X0) (u1_struct_0 X1)) \wedge (m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X1)))))) \wedge ((X3 = X4) \wedge ((X4 \in k1_funct_2 (u1_struct_0 X0) (u1_struct_0 X1)) \wedge (v5_orders_3 X4 X0 X1))))))) \quad (5)$$

Assume the following.

$$\forall X0.(l1_struct_0 X0) \Rightarrow (k3_struct_0 X0 = k6_partfun1 (u1_struct_0 X0)) \quad (6)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (k6_partfun1 (u1_struct_0 X0) \in k1_orders_3 X0 X0)$$