

t5_wellfnd1

(TMMawA26E8Mry2j6iG1x9SkLeeGBUugqL3a)

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Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $v12_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_wellord1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.(v1_relat_1 X2) \Rightarrow ((X0 \in k1_wellord1 X2 X1) \Leftrightarrow ((X0 \neq X1) \wedge (k4_tarski X0 X1 \in X2))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X0 \in k2_xboole_0 X2 (k1_tarski X1)) \Leftrightarrow ((X0 \in X2) \vee (X0 = X1)) \quad (2)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow (m1_subset_1 (u1_orders_2 X0) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (4)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow ((v12_waybel_0 X1 X0) \Leftrightarrow (\forall X2.\forall X3. ((X2 \in X1) \wedge (k4_tarski X3 X2 \in u1_orders_2 X0)) \Rightarrow (X3 \in X1)))) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.((v12_waybel_0 X1 X0) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow (\forall X3. \\ & ((X2 = k2_xboole_0 X1 (k1_tarski X3)) \wedge (r1_tarski (k1_wellord1 \\ & (u1_orders_2 X0) X3) X1)) \Rightarrow (v12_waybel_0 X2 X0)))) \end{aligned}$$