

t18_ordinal1
(TMdK4UEDQmLmBMFLey4rQ5Rai1nw1eyLk7C)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_ordinal1 : \iota \Rightarrow o$ be given. Let $r2_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (\forall X2. (X2 \in X0) \Rightarrow (r1_tarski X2 X1)) \Rightarrow (r1_tarski (k3_tarski X0) X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (v3_ordinal1 X1) \Rightarrow ((X0 \in X1) \Rightarrow (v3_ordinal1 X0)) \quad (2)$$

Assume the following.

$$\forall X0. (v1_ordinal1 X0) \Rightarrow (\forall X1. (v3_ordinal1 X1) \Rightarrow ((r2_xboole_0 X0 X1) \Rightarrow (X0 \in X1))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (r1_tarski X0 (k3_tarski X1)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (r2_xboole_0 X0 X1) \Leftrightarrow ((r1_tarski X0 X1) \wedge (X0 \neq X1)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (6)$$

Assume the following.

$$\forall X0. (v1_ordinal1 X0) \Leftrightarrow (\forall X1. (X1 \in X0) \Rightarrow (r1_tarski X1 X0)) \quad (7)$$

Assume the following.

$$\forall X0. (v3_ordinal1 X0) \Rightarrow ((v1_ordinal1 X0) \wedge (v2_ordinal1 X0)) \quad (8)$$

Theorem 1 $\forall X0. (v3_ordinal1 X0) \Rightarrow (v3_ordinal1 (k3_tarski X0)).$