

t34_ordinal5

(TMba78H5fqoKtb6FCMKegFt9JgMYNd17wyp)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_ordinal5 : \iota \Rightarrow \iota$ be given. Let $v1_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_ordinal5 : \iota \Rightarrow o$ be given. Let $v2_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v3_ordinal1 X2) \Rightarrow (((r1_tarski X0 X1) \wedge (X1 \in X2)) \Rightarrow (X0 \in X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v3_ordinal1 X0) \wedge (v3_ordinal1 X1)) \Rightarrow (\\ & (r1_ordinal1 X0 X1) \Leftrightarrow (r1_tarski X0 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v3_ordinal1 X0) \Rightarrow ((v3_ordinal1 (k2_ordinal5 X0)) \wedge \\ & (v4_ordinal5 (k2_ordinal5 X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.((v3_ordinal1 X1) \wedge (\\ & v4_ordinal5 X1)) \Rightarrow ((X1 = k2_ordinal5 X0) \Leftrightarrow ((X0 \in X1) \wedge (\forall X2. \\ & ((v3_ordinal1 X2) \wedge (v4_ordinal5 X2)) \Rightarrow ((X0 \in X2) \Rightarrow (r1_ordinal1 \\ & X1 X2)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow ((v1_ordinal1 X0) \wedge (v2_ordinal1 X0)) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow ((\\ & r1_ordinal1 X0 X1) \Rightarrow (r1_ordinal1 (k2_ordinal5 X0) (k2_ordinal5 \\ & X1)))) \end{aligned}$$