

t22_ordinal6
(TMbdEsTa4Ky6fbz4Rr6tF2ecvnSF36UmYN7)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v5_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_ordinal2 : \iota \Rightarrow o$ be given. Let $k2_ordinal6 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r3_wellord1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_wellord2 : \iota \Rightarrow \iota$ be given. Let $k1_ordinal6 : \iota \Rightarrow \iota$ be given. Let $k2_ordinal1 : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_relat_1 X2) \wedge (v1_funct_1 \\ & X2)) \Rightarrow ((r3_wellord1 (k1_wellord2 X0) (k1_wellord2 X1) X2) \Rightarrow (\forall X3. \\ & \forall X4. ((X3 \in X0) \wedge (X4 \in X0)) \Rightarrow ((r1_tarski X3 X4) \Leftrightarrow (r1_tarski \\ & (k1_funct_1 X2 X3) (k1_funct_1 X2 X4)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. r3_wellord1 (k1_wellord2 (k1_ordinal6 X0)) (k1_wellord2 (k2_ordinal1 X0)) (k2_ordinal6 X0) \quad (2)$$

Assume the following.

$$\forall X0. (k9_xtuple_0 (k2_ordinal6 X0) = k1_ordinal6 X0) \wedge (k10_xtuple_0 (k2_ordinal6 X0) = k2_ordinal1 X0) \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1_relat_1 X3) \wedge \\ & ((v1_funct_1 X3) \wedge ((v5_ordinal1 X3) \wedge (v1_ordinal2 X3)))) \Rightarrow (((\\ & X3 = k2_ordinal6 X0) \wedge ((X1 \in k9_xtuple_0 X3) \wedge (X2 \in k9_xtuple_0 X3))) \Rightarrow \\ & ((r1_tarski X1 X2) \Leftrightarrow (r1_tarski (k1_funct_1 X3 X1) (k1_funct_1 X3 \\ & X2)))) \end{aligned}$$