t30_wellord1 (TMUx7v6H1PjT5J3ju9YAk17KnJQfm5xBKWd)

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Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v2\_wellord1 : \iota \Rightarrow o$ be given. Let $k1\_relat\_1 : \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_wellord1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.(v1\_relat\_1\ X2) \Rightarrow (((v2\_wellord1\ X2) \wedge ((X0 \in k1\_relat\_1\ X2) \wedge (X1 \in k1\_relat\_1\ X2))) \Rightarrow ((k4\_tarski\ X0\ X1 \in X2) \Leftrightarrow (r1\_tarski\ (k1\_wellord1\ X2\ X0)\ (k1\_wellord1\ X2\ X1)))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(v1\_relat\_1\ X2) \Rightarrow ((X0 \in k1\_wellord1\ X2\ X1) \Leftrightarrow ((X0 \neq X1) \wedge (k4\_tarski\ X0\ X1 \in X2))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ X0\ X0 \tag{3}$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.(v1\_relat\_1\ X2) \Rightarrow (((v2\_wellord1\ X2) \wedge ((X0 \in k1\_relat\_1\ X2) \wedge (X1 \in k1\_relat\_1\ X2))) \Rightarrow ((r1\_tarski\ (k1\_wellord1\ X2\ X0)\ (k1\_wellord1\ X2\ X1)) \Leftrightarrow ((X0 = X1) \vee (X0 \in k1\_wellord1\ X2\ X1))))$$