t37_ordinal6 (TMV-JEB4vqg3vVAXxherfKPsScuLH6P1CDaV)

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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 $v2\_ordinal6 : \iota \Rightarrow o$ be given. Let $k3\_tarski : \iota \Rightarrow \iota$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $r1\_abian : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X1) \wedge ((v1\_funct\_1\ X1) \wedge ((v5\_ordinal1\ X1) \wedge (v1\_ordinal2\ X1)))) \Rightarrow (((v2\_ordinal6\ X1) \wedge ((k3\_tarski\ X0 \in k9\_xtuple\_0\ X1) \wedge (\forall X2.\neg(X2 \in X0) \wedge (\forall X3.\neg(r1\_tarski\ X2\ X3) \wedge ((X3 \in X0) \wedge (r1\_abian\ X3\ X1)))))) \Rightarrow ((v1\_xboole\_0\ X0) \vee (k3\_tarski\ X0 = k1\_funct\_1\ X1\ (k3\_tarski\ X0)))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \tag{2}$$

Theorem 1

$$\forall X0.\forall X1.((v1\_relat\_1\ X1) \wedge ((v1\_funct\_1\ X1) \wedge ((v5\_ordinal1\ X1) \wedge (v1\_ordinal2\ X1)))) \Rightarrow (((v2\_ordinal6\ X1) \wedge ((k3\_tarski\ X0 \in k9\_xtuple\_0\ X1) \wedge (\forall X2.(X2 \in X0) \Rightarrow (r1\_abian\ X2\ X1)))) \Rightarrow ((v1\_xboole\_0\ X0) \vee (k3\_tarski\ X0 = k1\_funct\_1\ X1\ (k3\_tarski\ X0))))$$