t38_classes1 (TMGhhSu6CDp8Tjns7HrHYoHsknf1Qgnojvx)

October 27, 2020

Let $v3\_ordinal1 : \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_classes1 : \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_ordinal1 : \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v4\_ordinal1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_ordinal1 : \iota \Rightarrow o$ be given. Let $v2\_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1\_tarski\ X0\ X1) \wedge (r1\_tarski\ X2\ X1)) \Rightarrow (r1\_tarski\ (k2\_xboole\_0\ X0\ X2)\ X1) \tag{1}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow ((r1\_ordinal1\ X0\ X1) \Leftrightarrow (r1\_tarski\ (k4\_classes1\ X0)\ (k4\_classes1\ X1)))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(v3\_ordinal1\ X1) \Rightarrow ((r1\_tarski\ X0\ (k4\_classes1\ X1)) \Leftrightarrow (X0 \in k4\_classes1\ (k1\_ordinal1\ X1))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ (k1\_tarski\ X0)\ X1) \Leftrightarrow (X0 \in X1) \tag{4}$$

Assume the following.

$$\forall X0.r1\_tarski\ k1\_xboole\_0\ X0 \tag{5}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow ((v4\_ordinal1\ X0) \Leftrightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow ((X1 \in X0) \Rightarrow (k1\_ordinal1\ X1 \in X0)))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1\ X0\ X1) \tag{7}$$

Assume the following.

$$\forall X0 : \iota \Rightarrow o.((X0\ k1\_xboole\_0) \wedge ((\forall X1.(v3\_ordinal1\ X1) \Rightarrow ((X0\ X1) \Rightarrow (X0\ (k1\_ordinal1\ X1)))) \wedge (\forall X1.(v3\_ordinal1\ X1) \Rightarrow (((v4\_ordinal1\ X1) \wedge (\forall X2.(v3\_ordinal1\ X2) \Rightarrow ((X2 \in X1) \Rightarrow (X0\ X2)))) \Rightarrow ((X1 = k1\_xboole\_0) \vee (X0\ X1)))))) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow (X0\ X1)) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((v3\_ordinal1\ X0) \wedge (v3\_ordinal1\ X1)) \Rightarrow ((r1\_ordinal1\ X0\ X1) \Leftrightarrow (r1\_tarski\ X0\ X1)) \tag{9}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow ((\neg v1\_xboole\_0\ (k1\_ordinal1\ X0)) \wedge (v3\_ordinal1\ (k1\_ordinal1\ X0))) \tag{10}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (v1\_ordinal1\ (k4\_classes1\ X0)) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \tag{12}$$

Assume the following.

$$\forall X0.(v1\_ordinal1\ X0) \Leftrightarrow (\forall X1.(X1 \in X0) \Rightarrow (r1\_tarski\ X1\ X0)) \tag{13}$$

Assume the following.

$$\forall X0.k1\_ordinal1\ X0 = k2\_xboole\_0\ X0\ (k1\_tarski\ X0) \tag{14}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (v3\_ordinal1\ X1)) \tag{15}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow ((v1\_ordinal1\ X0) \wedge (v2\_ordinal1\ X0)) \tag{16}$$

Theorem 1 $\forall X0.(v3\_ordinal1\ X0) \Rightarrow (r1\_tarski\ X0\ (k4\_classes1\ X0))$.