t3_zf_colla (TMZYXK7n1MP9kHcKM33DoFq78XCpM7apN4t)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v3\_ordinal1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_zf\_colla : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_ordinal1 : \iota \Rightarrow \iota$ be given. Let $r1\_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.X0 \in k1\_ordinal1\ X0 \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ X1) \Rightarrow ((v1\_xboole\_0\ X1) \vee (X0 \in X1)) \tag{2}$$

Assume the following.

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

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow (k1\_zf\_colla\ X0\ X1 = ReplSep\ (toset\ (\lambda X2 : \iota.m1\_subset\_1\ X2\ X0))\ (\lambda X2 : \iota.\forall X3.(m1\_subset\_1\ X3\ X0) \Rightarrow (\neg(X3 \in X2) \wedge (\forall X4.(v3\_ordinal1\ X4) \Rightarrow (\neg(X4 \in X1) \wedge (X3 \in k1\_zf\_colla\ X0\ X4)))))\ (\lambda X2 : \iota.X2))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1\ X0\ X1) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v3\_ordinal1\ X0) \wedge (v3\_ordinal1\ X1)) \Rightarrow ((r1\_ordinal1\ X0\ X1) \Leftrightarrow (r1\_tarski\ X0\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow ((\neg v1\_xboole\_0\ (k1\_ordinal1\ X0)) \wedge (v3\_ordinal1\ (k1\_ordinal1\ X0))) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k3\_xboole\_0\ X0\ X1) \Leftrightarrow (\forall X3.(X3 \in X2) \Leftrightarrow ((X3 \in X0) \wedge (X3 \in X1))) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \tag{9}$$

Assume the following.

$$\forall X0.k1\_ordinal1\ X0 = k2\_xboole\_0\ X0\ (k1\_tarski\ X0) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.k3\_xboole\_0\ X0\ X1 = k3\_xboole\_0\ X1\ X0 \tag{11}$$

Theorem 1

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ X0) \Rightarrow ((r1\_tarski\ (k3\_xboole\_0\ X2\ X0)\ (k1\_zf\_colla\ X0\ X1)) \Leftrightarrow (X2 \in k1\_zf\_colla\ X0\ (k1\_ordinal1\ X1))))))$$