

t27\_zfrefle1 (TMTBx-  
HFHMP6WiqMgUWcRVc7nVybH1uM1LTM)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_classes2 : \iota \Rightarrow o$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r2\_ordinal2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_ordinal1 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_ordinal2 : \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $v5\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k4\_ordinal2 : \iota \Rightarrow \iota$  be given. Let  $v1\_ordinal2 : \iota \Rightarrow o$  be given. Let  $v2\_ordinal2 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. r1\_tarski (k2\_ordinal1 X0) X0 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1\_xboole\_0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 X1) \Rightarrow ((v1\_xboole\_0 X1) \wedge (X0 \in X1)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1\_tarski X0 X1) \wedge (r1\_tarski X1 X2)) \Rightarrow (r1\_tarski X0 X2) \quad (4)$$

Assume the following.

$$\forall X0. ((\neg v1\_xboole\_0 X0) \wedge (v1\_classes2 X0)) \Rightarrow (\forall X1. (X1 \in X0) \Rightarrow (k3\_ordinal2 X1 \in X0)) \quad (5)$$

Assume the following.

$$\forall X0. ((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (\forall X1. ((\neg v1\_xboole\_0 X1) \wedge (v1\_classes2 X1)) \Rightarrow (((k9\_xtuple\_0 X0 \in X1) \wedge (r1\_tarski (k10\_xtuple\_0 X0) X1)) \Rightarrow (k10\_xtuple\_0 X0 \in X1))) \quad (6)$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0 X0) \wedge (v1\_classes2 X0)) \Rightarrow (v3\_ordinal1 (k2\_ordinal1 X0)) \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k2\_ordinal1 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow ((X2 \in X0) \wedge (v3\_ordinal1 X2))) \quad (8)$$

Assume the following.

$$\forall X0. ((v5\_ordinal1 X0) \wedge ((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0))) \Rightarrow (k4\_ordinal2 X0 = k3\_ordinal2 (k10\_xtuple\_0 X0)) \quad (9)$$

Assume the following.

$$\forall X0. (v3\_ordinal1 X0) \Rightarrow (\forall X1. (v3\_ordinal1 X1) \Rightarrow ((r2\_ordinal2 X0 X1) \Leftrightarrow (\exists X2. ((v5\_ordinal1 X2) \wedge ((v1\_relat\_1 X2) \wedge ((v1\_funct\_1 X2) \wedge (v1\_ordinal2 X2)))) \wedge ((k9\_xtuple\_0 X2 = X1) \wedge ((r1\_tarski (k10\_xtuple\_0 X2) X0) \wedge ((v2\_ordinal2 X2) \wedge (X0 = k4\_ordinal2 X2)))))))) \quad (10)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (\neg X1 \in X0) \quad (11)$$

**Theorem 1**

$$\forall X0. ((\neg v1\_xboole\_0 X0) \wedge (v1\_classes2 X0)) \Rightarrow (\forall X1. ((v3\_ordinal1 X1) \wedge (m1\_subset\_1 X1 X0)) \Rightarrow (\neg r2\_ordinal2 (k2\_ordinal1 X0) X1))$$