

t15_zf_refle
(TMPvoTiGDRzgpakZSFfqf8VPR37LgaDi2ns)

October 27, 2020

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 $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v2_relat_1 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_zf_refle : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_ordinal1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge (v1_classes2 X0)) \Rightarrow (\forall X1. \\ & ((v3_ordinal1 X1) \wedge (m1_subset_1 X1 X0)) \Leftrightarrow (X1 \in k2_ordinal1 X0)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge (v1_classes2 X0)) \Rightarrow (\forall X1. \\ & ((v1_relat_1 X1) \wedge ((v5_relat_1 X1 X0) \wedge ((v5_ordinal1 X1) \wedge (v1_funct_1 \\ & X1)))) \Rightarrow ((v1_zf_refle X1 X0) \Leftrightarrow (k9_xtuple_0 X1 = k2_ordinal1 X0))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge (v1_classes2 X0)) \Rightarrow (\forall X1. \\ & ((v3_ordinal1 X1) \wedge (m1_subset_1 X1 X0)) \Rightarrow (\forall X2.((v1_relat_1 \\ & X2) \wedge ((v2_relat_1 X2) \wedge ((v5_relat_1 X2 X0) \wedge ((v5_ordinal1 X2) \wedge \\ & ((v1_funct_1 X2) \wedge (v1_zf_refle X2 X0))))))) \Rightarrow (X1 \in k9_xtuple_0 X2))) \end{aligned}$$