

t68_classes2
(TMa25pcYAREpsn5EQsrdZ8gfqx3xrJ5HxDM)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v4_ordinal1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_classes2 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k15_classes2 : \iota \Rightarrow \iota$ be given. Let $k3_card_3 : \iota \Rightarrow \iota$ be given. Let $k13_classes2 : \iota$ be given. Let $k1_ordinal1 : \iota \Rightarrow \iota$ be given. Let $k1_classes1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & (k16_classes2\ k1_xboole_0 = k13_classes2) \wedge ((\forall X0.(v3_ordinal1 \\
 & X0) \Rightarrow (k16_classes2\ (k1_ordinal1\ X0) = k1_classes1\ (k16_classes2 \\
 & X0))) \wedge (\forall X0.(v3_ordinal1\ X0) \Rightarrow (\forall X1.((v1_relat_1 \\
 & X1) \wedge ((v5_ordinal1\ X1) \wedge (v1_funct_1\ X1))) \Rightarrow (((v4_ordinal1\ X0) \wedge \quad (1) \\
 & ((k9_xtuple_0\ X1 = X0) \wedge (\forall X2.(v3_ordinal1\ X2) \Rightarrow ((X2 \in X0) \Rightarrow \\
 & (k1_funct_1\ X1\ X2 = k16_classes2\ X2)))))) \Rightarrow ((X0 = k1_xboole_0) \vee (\\
 & k16_classes2\ X0 = k15_classes2\ (k3_card_3\ X1))))))
 \end{aligned}$$

Theorem 1

$$\begin{aligned}
 & \forall X0.(v3_ordinal1\ X0) \Rightarrow (\forall X1.((v1_relat_1\ X1) \wedge ((\\
 & v5_ordinal1\ X1) \wedge (v1_funct_1\ X1))) \Rightarrow (((v4_ordinal1\ X0) \wedge ((k9_xtuple_0 \\
 & X1 = X0) \wedge (\forall X2.(v3_ordinal1\ X2) \Rightarrow ((X2 \in X0) \Rightarrow (k1_funct_1\ X1 \\
 & X2 = k16_classes2\ X2)))))) \Rightarrow ((X0 = k1_xboole_0) \vee (k16_classes2\ X0 = \\
 & k15_classes2\ (k3_card_3\ X1))))))
 \end{aligned}$$