

t10_ordinal5

(TMQv5PyJtKSuJ3H3jYwFL8tEqVYpb58HYF2)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v5_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_ordinal2 : \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_ordinal2 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v5_ordinal1 X0) \wedge ((v1_funct_1 \\ X0) \wedge (v1_ordinal2 X0)))) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (((np_1 \in \\ X1) \wedge (\forall X2.(v3_ordinal1 X2) \Rightarrow ((X2 \in k9_xtuple_0 X0) \Rightarrow (k1_funct_1 \\ X0 X2 = k12_ordinal2 X1 X2)))))) \Rightarrow (v2_ordinal2 X0)) \end{aligned} \quad (1)$$

Theorem 1

$$\begin{aligned} \forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((\\ v1_funct_1 X1) \wedge ((v5_ordinal1 X1) \wedge (v1_ordinal2 X1)))) \Rightarrow (((np_1 \in \\ X0) \wedge (\forall X2.(v3_ordinal1 X2) \Rightarrow ((X2 \in k9_xtuple_0 X1) \Rightarrow (k1_funct_1 \\ X1 X2 = k12_ordinal2 X0 X2)))))) \Rightarrow (v2_ordinal2 X1)) \end{aligned}$$