

l19_prvect_3

(TMHeK4y2eHY596JoE7UvZHcyprA1eJRzJFh)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v2_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k4_card_3 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.((\\ v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((X0 \in k4_card_3 X1) \Leftrightarrow ((k9_xtuple_0 \\ X0 = k9_xtuple_0 X1) \wedge (\forall X2.(X2 \in k9_xtuple_0 X1) \Rightarrow (k1_funct_1 \\ X0 X2 \in k1_funct_1 X1 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.(X1 \in k4_card_3 X0) \Rightarrow ((v1_relat_1 X1) \wedge (v1_funct_1 X1))) \tag{2}$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow ((v1_finseq_1 X0) \Leftrightarrow (\exists X1.(v7_ordinal1 X1) \wedge (k9_xtuple_0 X0 = k2_finseq_1 X1))) \tag{3}$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v1_xboole_0 X0) \wedge ((v1_relat_1 X0) \wedge ((v2_relat_1 \\ X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0)))))) \Rightarrow (\forall X1.(X1 \in \\ k4_card_3 X0) \Rightarrow ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 \\ X1)))) \end{aligned}$$