t8_pralg_1 (TMK9SmqNrB2gC9uZkGLrnCRAN9UrxjjUHzU)

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Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $k19\_margrel1 : \iota \Rightarrow \iota$ be given. Let $k7\_pralg\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_1 : \iota \Rightarrow o$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_card\_1 : \iota \Rightarrow \iota$ be given. Let $v2\_margrel1 : \iota \Rightarrow o$ be given. Let $k18\_margrel1 : \iota \Rightarrow \iota$ be given. Let $k2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3\_card\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v3\_margrel1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_finseq\_2 : \iota \Rightarrow \iota$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v1\_finseq\_1\ X0))) \Rightarrow (k3\_finseq\_1\ X0 = k1\_card\_1\ X0) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v2\_margrel1\ X0))) \Rightarrow (k19\_margrel1\ X0 = k18\_margrel1\ X0) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(v7\_ordinal1\ X0) \Rightarrow ((v1\_relat\_1\ (k2\_finseq\_2\ X0\ X1)) \wedge ((v1\_funct\_1\ (k2\_finseq\_2\ X0\ X1)) \wedge ((v3\_card\_1\ (k2\_finseq\_2\ X0\ X1)\ X0) \wedge (v1\_finseq\_1\ (k2\_finseq\_2\ X0\ X1))))) \tag{3}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow ((v1\_funct\_1\ (k7\_pralg\_1\ X0)) \wedge ((\neg v1\_xboole\_0\ (k7\_pralg\_1\ X0)) \wedge ((v2\_margrel1\ (k7\_pralg\_1\ X0)) \wedge (v3\_margrel1\ (k7\_pralg\_1\ X0)\ (k1\_tarski\ k1\_xboole\_0))))) \tag{4}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow ((v1\_funct\_1\ (k7\_pralg\_1\ X0)) \wedge (m1\_subset\_1\ (k7\_pralg\_1\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k3\_finseq\_2\ (k1\_tarski\ k1\_xboole\_0))\ (k1\_tarski\ k1\_xboole\_0))))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(v7\_ordinal1\ X0)\Rightarrow((v1\_relat\_1\ (k2\_finseq\_2\ X0\ X1))\wedge((v1\_funct\_1\ (k2\_finseq\_2\ X0\ X1))\wedge(v1\_finseq\_1\ (k2\_finseq\_2\ X0\ X1)))) \tag{6}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge(v2\_margrel1\ X0))\Rightarrow(v7\_ordinal1\ (k18\_margrel1\ X0)) \tag{7}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k3\_finseq\_2\ (k1\_tarski\ k1\_xboole\_0))\ (k1\_tarski\ k1\_xboole\_0)))))\Rightarrow((X1 = k7\_pralg\_1\ X0)\Leftrightarrow((k9\_xtuple\_0\ X1 = k1\_tarski\ (k2\_finseq\_2\ X0\ k1\_xboole\_0))\wedge(k10\_xtuple\_0\ X1 = k1\_tarski\ k1\_xboole\_0)))) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.(v3\_card\_1\ X1\ X0)\Leftrightarrow(k1\_card\_1\ X1 = X0) \tag{9}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge(v2\_margrel1\ X0))\Rightarrow(\forall X1.(v7\_ordinal1\ X1)\Rightarrow(((\exists X2.((v1\_relat\_1\ X2)\wedge((v1\_funct\_1\ X2)\wedge(v1\_finseq\_1\ X2)))\wedge(X2 \in k9\_xtuple\_0\ X0))\Rightarrow((X1 = k18\_margrel1\ X0)\Leftrightarrow(\forall X2.((v1\_relat\_1\ X2)\wedge((v1\_funct\_1\ X2)\wedge(v1\_finseq\_1\ X2)))\Rightarrow((X2 \in k9\_xtuple\_0\ X0)\Rightarrow(X1 = k3\_finseq\_1\ X2)))))\wedge((\forall X2.((v1\_relat\_1\ X2)\wedge((v1\_funct\_1\ X2)\wedge(v1\_finseq\_1\ X2)))\Rightarrow(\neg X2 \in k9\_xtuple\_0\ X0))\Rightarrow((X1 = k18\_margrel1\ X0)\Leftrightarrow(X1 = k6\_numbers))))) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1\_tarski\ X0)\Leftrightarrow(\forall X2.(X2 \in X1)\Leftrightarrow(X2 = X0)) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_relat\_1\ X2) \tag{12}$$

Theorem 1 $\forall X0.(v7\_ordinal1\ X0)\Rightarrow(k19\_margrel1\ (k7\_pralg\_1\ X0) = X0)$.