

t13_jordan23

(TMLFn1oAhkZHbLAWm2oNKKuXARPu88VLhpS)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_jordan23 : \iota \Rightarrow o$ be given. Let $v1_finseq_6 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_finseq_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $np_2 : \iota$ be given. Let $v2_jordan23 : \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ ((k3_finseq_1 X0 \neq np_2) \Rightarrow ((v2_jordan23 X0) \Leftrightarrow (v3_jordan23 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow \\ (\forall X2.(m2_finseq_1 X2 X0) \Rightarrow (k3_finseq_1 (k1_finseq_6 X0 \\ X2 X1) = k3_finseq_1 X2))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 X0) \Rightarrow \\ (((v2_jordan23 X1) \wedge (v1_finseq_6 X1 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ X2 X0) \Rightarrow (v2_jordan23 (k1_finseq_6 X0 X1 X2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1.(m1_finseq_1 X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge (v1_funct_1 X1) \wedge (v1_finseq_1 X1)) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0)\wedge((m1_finseq_1 \\ & X1 X0)\wedge(m1_subset_1 X2 X0)))\Rightarrow(m2_finseq_1 (k1_finseq_6 X0 X1 X2) \\ & X0) \end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_finseq_1 X0)))\Rightarrow \\ & (((k3_finseq_1 X0 \neq np_2)\Rightarrow((v3_jordan23 X0)\Leftrightarrow(\forall X1.(m1_subset_1 \\ & X1 k5_numbers)\Rightarrow(\neg(r1_xxreal_0 np_1 X1)\wedge((\neg r1_xxreal_0 (k3_finseq_1 \\ & X0) X1)\wedge(k1_funct_1 X0 X1 = k1_funct_1 X0 (k2_nat_1 X1 np_1))))))\wedge \\ & ((k3_finseq_1 X0 = np_2)\Rightarrow(v3_jordan23 X0))) \end{aligned} \tag{7}$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.(m2_finseq_1 X1 X0)\Rightarrow \\ & (((v3_jordan23 X1)\wedge(v1_finseq_6 X1 X0))\Rightarrow(\forall X2.(m1_subset_1 \\ & X2 X0)\Rightarrow(v3_jordan23 (k1_finseq_6 X0 X1 X2)))) \end{aligned}$$