

t10_jordan23
(TMR5SUXWFmHJq2kRGRbH9K4MfkQgxsndaGU)

October 27, 2020

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 $v3_jordan23 : \iota \Rightarrow o$ be given. Let $k3_finseq_5 : \iota \Rightarrow \iota$ be given. Let $v2_jordan23 : \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ 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. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow ((v2_jordan23 X0) \Rightarrow (v2_jordan23 (k3_finseq_5 X0))) \quad (1)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow ((k3_finseq_1 X0 \neq np_2) \Rightarrow ((v2_jordan23 X0) \Leftrightarrow (v3_jordan23 X0))) \quad (2)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow ((v1_relat_1 (k3_finseq_5 X0)) \wedge ((v1_funct_1 (k3_finseq_5 X0)) \wedge (v1_finseq_1 (k3_finseq_5 X0)))) \quad (3)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow (((k3_finseq_1 X0 \neq np_2) \Rightarrow ((v3_jordan23 X0) \Leftrightarrow (\forall X1.(m1_subset_1 X1 k5_numbers) \Rightarrow (\neg(r1_xxreal_0 np_1 X1) \wedge ((\neg r1_xxreal_0 (k3_finseq_1 X0) X1) \wedge (k1_funct_1 X0 X1 = k1_funct_1 X0 (k2_nat_1 X1 np_1)))))))) \wedge ((k3_finseq_1 X0 = np_2) \Rightarrow (v3_jordan23 X0))) \quad (4)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\
& \quad (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 \\
& X1))) \Rightarrow ((X1 = k3_finseq_5 X0) \Leftrightarrow ((k3_finseq_1 X1 = k3_finseq_1 X0) \wedge \\
& \quad (\forall X2.(v7_ordinal1 X2) \Rightarrow ((X2 \in k4_finseq_1 X1) \Rightarrow (k1_funct_1 \\
& X1 X2 = k1_funct_1 X0 (k2_xcmplx_0 (k6_xcmplx_0 (k3_finseq_1 X0) \\
& \quad X2) np_1)))))))))
\end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\
& \quad ((v3_jordan23 X0) \Rightarrow (v3_jordan23 (k3_finseq_5 X0)))
\end{aligned}$$