

t11_jordan1b
(TMSwHjYtra1FvrDH477rGt9T7bimxwT8bcc)

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 $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k1_jordan1a : \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v3_xxreal_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ 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 $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $np_2 : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v2_finseq_1 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $k3_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\neg(\neg r1_xxreal_0 X0 X1) \wedge ((\neg v3_xxreal_0 X1) \wedge (\neg v2_xxreal_0 X0)))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2.(v1_xreal_0 X2) \Rightarrow ((r1_xxreal_0 X0 X1) \Leftrightarrow (r1_xxreal_0 (k2_xcmplx_0 X0 X2) (k2_xcmplx_0 X1 X2)))))) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\neg(X0 \in X1) \wedge ((m1_subset_1 X1 (k1_zfmisc_1 X2)) \wedge (v1_xboole_0 X2)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (5)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k2_xcmplx_0 X0 \ k6_numbers = X0) \quad (6)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_2) \wedge (m2_subset_1 \ np_2 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_2 \ k5_numbers) \wedge (m1_subset_1 \ np_2 \ k1_numbers)) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (9)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (10)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((m1_subset_1 X0 \ k5_numbers) \wedge (v7_ordinal1 \\ & X1)) \Rightarrow (k2_nat_1 X0 X1 = k2_xcmplx_0 X0 X1) \end{aligned} \quad (12)$$

Assume the following.

$$\begin{aligned} & \exists X0. (v1_relat_1 X0) \wedge ((v2_relat_1 X0) \wedge ((v4_relat_1 X0 \\ & k5_numbers) \wedge ((v1_funct_1 X0) \wedge ((\neg v1_xboole_0 X0) \wedge ((v1_finset_1 \\ & X0) \wedge ((v1_finseq_1 X0) \wedge (v2_finseq_1 X0))))))) \end{aligned} \quad (13)$$

Assume the following.

$$\begin{aligned} & \exists X0. (v1_xboole_0 X0) \wedge ((v1_xcmplx_0 X0) \wedge ((v1_xxreal_0 \\ & X0) \wedge (v1_xreal_0 X0))) \end{aligned} \quad (14)$$

Assume the following.

$$v6_membered \ k4_ordinal1 \quad (15)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_xreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow (v1_xreal_0 \\ & (k2_xcmplx_0 X0 X1)) \end{aligned} \quad (16)$$

Assume the following.

$$m1_subset_1\ k5_numbers\ (k1_zfmisc_1\ k1_numbers) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1\ X0)\wedge(v7_ordinal1\ X1))\Rightarrow(m1_subset_1\ (k3_nat_d\ X0\ X1)\ k5_numbers) \quad (18)$$

Assume the following.

$$\forall X0.((v1_relat_1\ X0)\wedge((v1_funct_1\ X0)\wedge(v1_finseq_1\ X0)))\Rightarrow(m2_subset_1\ (k3_finseq_1\ X0)\ k1_numbers\ k5_numbers) \quad (19)$$

Assume the following.

$$\forall X0.((v1_relat_1\ X0)\wedge((v1_funct_1\ X0)\wedge(v1_finseq_1\ X0)))\Rightarrow(k1_jordan1a\ X0 = k2_nat_1\ (k3_nat_d\ (k3_finseq_1\ X0)\ np_2)\ np_1) \quad (20)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0\ X0)\wedge(v1_xcmplx_0\ X1))\Rightarrow(k2_xcmplx_0\ X0\ X1 = k2_xcmplx_0\ X1\ X0) \quad (21)$$

Assume the following.

$$\forall X0.(v1_xboole_0\ X0)\Rightarrow(\forall X1.((v1_relat_1\ X1)\wedge(v4_relat_1\ X1\ X0))\Rightarrow((v1_xboole_0\ X1)\wedge((v1_relat_1\ X1)\wedge(v4_relat_1\ X1\ X0)))) \quad (22)$$

Assume the following.

$$\forall X0.((v1_xxreal_0\ X0)\wedge(v2_xxreal_0\ X0))\Rightarrow((\neg v1_xboole_0\ X0)\wedge((v1_xxreal_0\ X0)\wedge(\neg v3_xxreal_0\ X0))) \quad (23)$$

Assume the following.

$$\forall X0.(v1_xxreal_0\ X0)\Rightarrow(v1_xcmplx_0\ X0) \quad (24)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow((v7_ordinal1\ X0)\wedge(\neg v3_xxreal_0\ X0)) \quad (25)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(v1_xxreal_0\ X0) \quad (26)$$

Assume the following.

$$\forall X0.(v6_membered\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ X0)\Rightarrow(v7_ordinal1\ X1)) \quad (27)$$

Theorem 1

$$\forall X0.((v1_relat_1\ X0)\wedge((v1_funct_1\ X0)\wedge(v1_finseq_1\ X0)))\Rightarrow(r1_xxreal_0\ np_1\ (k1_jordan1a\ X0))$$