

152_jordan3

(TMGj2cLomqy1uhcFjiXP4VgzNvny3LiNYyn)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k17_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_rfinseq : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_0 : \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k7_nat.d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xreal_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k2_finseq_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_rfinseq : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ 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 $k3_finseq_5 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k6_xcmplx_0 X0 \ k6_numbers = X0) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Rightarrow (k2_rfinseq X0 \ k6_numbers \ X1 = X1) \quad (3)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$(m2_subset_1 \ np_0 \ k1_numbers \ k5_numbers) \wedge ((m1_subset_1 \ np_0 \ k5_numbers) \wedge (m1_subset_1 \ np_0 \ k1_numbers)) \quad (5)$$

Assume the following.

$$v1_xboole_0 \ np_0 \tag{6}$$

Assume the following.

$$k6_xcmplx_0 \ np_0 \ np_1 = k4_xcmplx_0 \ np_1 \tag{7}$$

Assume the following.

$$k2_xcmplx_0 \ np_0 \ np_1 = np_1 \tag{8}$$

Assume the following.

$$\neg r1_xxreal_0 \ np_0 \ (k4_xcmplx_0 \ np_1) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 \ X0)\wedge(v1_xxreal_0 \ X1))\Rightarrow(r1_xxreal_0 \ X0 \ X0) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 \ X1 \ X0)\Leftrightarrow(m1_finseq_1 \ X1 \ X0) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 \ X0)\wedge(v7_ordinal1 \ X1))\Rightarrow(k7_nat_d \ X0 \ X1 = k1_xreal_0 \ X0 \ X1) \tag{12}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{13}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{14}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 \ X0)\wedge((m1_finseq_1 \ X1 \ X0)\wedge((v7_ordinal1 \ X2)\wedge(v7_ordinal1 \ X3))))\Rightarrow(k3_finseq_6 \ X0 \ X1 \ X2 \ X3 = k2_finseq_6 \ X1 \ X2 \ X3) \tag{15}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7_ordinal1 \ X1)\wedge(m1_finseq_1 \ X2 \ X0))\Rightarrow(k2_rfinseq \ X0 \ X1 \ X2 = k1_rfinseq \ X1 \ X2) \tag{16}$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 \ X0 \ k5_numbers)\wedge(v7_ordinal1 \ X1))\Rightarrow(k2_nat_1 \ X0 \ X1 = k2_xcmplx_0 \ X0 \ X1) \tag{17}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7_ordinal1\ X1)\wedge(m1_finseq_1\ X2\ X0))\Rightarrow(k17_finseq_1\ X0\ X1\ X2 = k16_finseq_1\ X1\ X2) \quad (18)$$

Assume the following.

$$\exists X0.(v1_xboole_0\ X0)\wedge((v1_xcmplx_0\ X0)\wedge((v1_xxreal_0\ X0)\wedge(v1_xreal_0\ X0))) \quad (19)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1\ X1\ X0)\Rightarrow((v1_relat_1\ X1)\wedge(v1_funct_1\ X1)\wedge(v1_finseq_1\ X1)) \quad (20)$$

Assume the following.

$$\begin{aligned} &\forall X0.((v1_relat_1\ X0)\wedge((v1_funct_1\ X0)\wedge(v1_finseq_1\ X0)))\Rightarrow \\ &\quad (\forall X1.(v7_ordinal1\ X1)\Rightarrow(\forall X2.(v7_ordinal1\ X2)\Rightarrow(\\ &\quad ((r1_xxreal_0\ X1\ X2)\Rightarrow(k2_finseq_6\ X0\ X1\ X2 = k16_finseq_1\ (k2_nat_1 \\ &\quad (k7_nat_d\ X2\ X1)\ np_1)\ (k1_rfinseq\ (k7_nat_d\ X1\ np_1)\ X0)))\wedge(\\ &\quad (\neg r1_xxreal_0\ X1\ X2)\Rightarrow(k2_finseq_6\ X0\ X1\ X2 = k3_finseq_5\ (k16_finseq_1 \\ &\quad (k2_nat_1\ (k7_nat_d\ X1\ X2)\ np_1)\ (k1_rfinseq\ (k7_nat_d\ X2\ np_1) \\ &\quad X0)))))) \quad (21) \end{aligned}$$

Assume the following.

$$\begin{aligned} &\forall X0.(v1_xreal_0\ X0)\Rightarrow(\forall X1.(v1_xreal_0\ X1)\Rightarrow(((r1_xxreal_0 \\ &\quad k6_numbers\ (k6_xcmplx_0\ X0\ X1))\Rightarrow(k1_xreal_0\ X0\ X1 = k6_xcmplx_0 \\ &\quad X0\ X1))\wedge((\neg r1_xxreal_0\ k6_numbers\ (k6_xcmplx_0\ X0\ X1))\Rightarrow(k1_xreal_0 \\ &\quad X0\ X1 = k6_numbers)))) \quad (22) \end{aligned}$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k4_ordinal1)\Rightarrow(v7_ordinal1\ X0) \quad (23)$$

Assume the following.

$$\forall X0.(v1_xboole_0\ X0)\Rightarrow(v7_ordinal1\ X0) \quad (24)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k1_numbers)\Rightarrow(v1_xreal_0\ X0) \quad (25)$$

Theorem 1

$$\begin{aligned} &\forall X0.(\neg v1_xboole_0\ X0)\Rightarrow(\forall X1.(m2_finseq_1\ X1\ X0)\Rightarrow \\ &\quad (k3_finseq_6\ X0\ X1\ k6_numbers\ k6_numbers = k17_finseq_1\ X0\ np_1 \\ &\quad X1)) \end{aligned}$$