

t24_jordan5a

(TMWi54kUSrw2xSu6jmyQRmVWU5KWRnUsHvH)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_topmetr : \iota$ be given. Let $k6_measure6 : \iota \Rightarrow \iota$ be given. Let $k2_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v3_rcomp_1 : \iota \Rightarrow o$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_pcomps_1 : \iota \Rightarrow \iota$ be given. Let $k8_metric_1 : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $g1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 k1_numbers) \Rightarrow ((X1 \in k6_measure6 X0) \Leftrightarrow (\forall X2. \\ & ((v3_rcomp_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 k1_numbers)))) \Rightarrow \\ & (\neg(X1 \in X2) \wedge (v1_xboole_0 (k9_subset_1 k1_numbers X2 X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow ((X0 \in k2_pcomps_1 k8_metric_1) \Leftrightarrow (v3_rcomp_1 X0)) \quad (3)$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (5)$$

Assume the following.

$$u1_struct_0 \ k3_topmetr = k1_numbers \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.r1_tarski \ X0 \ X0 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 \ X2 \ (k1_zfmisc_1 \ X0)) \Rightarrow (k9_subset_1 \ X0 \ X1 \ X2 = k3_xboole_0 \ X1 \ X2) \quad (8)$$

Assume the following.

$$k3_topmetr = g1_pre_topc \ (u1_struct_0 \ k8_metric_1) \ (k2_pcomps_1 \ k8_metric_1) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 \ X1 \ (k1_zfmisc_1 \ (k1_zfmisc_1 \ X0))) \Rightarrow (\forall X2.\forall X3.(g1_pre_topc \ X0 \ X1 = g1_pre_topc \ X2 \ X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \quad (10)$$

Assume the following.

$$(\neg v2_struct_0 \ k3_topmetr) \wedge ((v1_pre_topc \ k3_topmetr) \wedge (v2_pre_topc \ k3_topmetr)) \quad (11)$$

Assume the following.

$$v1_xboole_0 \ k1_xboole_0 \quad (12)$$

Assume the following.

$$\forall X0.(l1_pre_topc \ X0) \Rightarrow (m1_subset_1 \ (u1_pre_topc \ X0) \ (k1_zfmisc_1 \ (k1_zfmisc_1 \ (u1_struct_0 \ X0)))) \quad (13)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ (k1_zfmisc_1 \ k1_numbers)) \Rightarrow (m1_subset_1 \ (k6_measure6 \ X0) \ (k1_zfmisc_1 \ k1_numbers)) \quad (14)$$

Assume the following.

$$(v2_pre_topc \ k3_topmetr) \wedge (l1_pre_topc \ k3_topmetr) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.(r1_xboole_0 \ X0 \ X1) \Leftrightarrow (k3_xboole_0 \ X0 \ X1 = k1_xboole_0) \quad (16)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1 \\ (u1_struct_0\ X0))) \Rightarrow (\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1 \\ (u1_struct_0\ X0))) \Rightarrow ((X2 = k2_pre_topc\ X0\ X1) \Leftrightarrow (\forall X3.(X3 \in \\ u1_struct_0\ X0) \Rightarrow ((X3 \in X2) \Leftrightarrow (\forall X4.(m1_subset_1\ X4\ (k1_zfmisc_1 \\ (u1_struct_0\ X0))) \Rightarrow (\neg(v3_pre_topc\ X4\ X0) \wedge ((X3 \in X4) \wedge (r1_xboole_0 \\ X1\ X4)))))))))) \end{aligned} \quad (17)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1 \\ (u1_struct_0\ X0))) \Rightarrow ((v3_pre_topc\ X1\ X0) \Leftrightarrow (X1 \in u1_pre_topc\ X0))) \end{aligned} \quad (18)$$

Assume the following.

$$\forall X0.\forall X1.k3_xboole_0\ X0\ X1 = k3_xboole_0\ X1\ X0 \quad (19)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc\ X0) \Rightarrow ((v1_pre_topc\ X0) \Rightarrow (X0 = g1_pre_topc \\ (u1_struct_0\ X0)\ (u1_pre_topc\ X0))) \end{aligned} \quad (20)$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers)) \Rightarrow (\forall X1. \\ (m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ k3_topmetr))) \Rightarrow ((X0 = \\ X1) \Rightarrow (k6_measure6\ X0 = k2_pre_topc\ k3_topmetr\ X1))) \end{aligned}$$