

l1_jordan22

(TMb5Ge9ycEBYRMiM7dZkUDrVmqLuysm77LB)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k7_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k5_pscomp_1 : \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1_funct_1 X3) \wedge \\ & ((v1_funct_2 X3 X0 X1) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X1)))) \Rightarrow (\forall X4. \neg (X4 \in k7_relset_1 X0 X1 X3 X2) \wedge (\forall X5. \\ & \neg (X5 \in X0) \wedge ((X5 \in X2) \wedge (X4 = k1_funct_1 X3 X5)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1_xboole_0 X0) \wedge \\ & (((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))) \wedge (m1_subset_1 X3 X0))) \Rightarrow (k3_funct_2 X0 \\ & X1 X2 X3 = k1_funct_1 X2 X3) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & (v1_funct_1 k5_pscomp_1) \wedge ((v1_funct_2 k5_pscomp_1 (u1_struct_0 \\ & (k15_euclid np_2)) k1_numbers) \wedge (m1_subset_1 k5_pscomp_1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 (u1_struct_0 (k15_euclid np_2)) k1_numbers)))) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0. (v1_xboole_0 X0) \Leftrightarrow (\forall X1. \neg X1 \in X0) \tag{5}$$

Theorem 1

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (\neg(X0 \in k7_relset_1 (u1_struct_0 \\ (k15_euclid np_2)) k1_numbers k5_pscomp_1 X1) \wedge (\forall X2.(\\ m1_subset_1 X2 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (\neg(X2 \in X1) \wedge \\ (k3_funct_2 (u1_struct_0 (k15_euclid np_2)) k1_numbers k5_pscomp_1 \\ X2 = X0)))))) \end{aligned}$$