

t23_jordan18

(TMLdD2Yiag3CvFzFKDzeCKMppeGMTsdhfd3L)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $r2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_jordan18 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_jordan18 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1.((v2_compts_1 X1 (k15_euclid np_2)) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow (\neg(X0 \in k1_jordan2c \\ & np_2 X1) \wedge (k2_jordan18 X0 X1 = k1_jordan18 X0 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ & np_2)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid \\ & np_2)))) \Rightarrow ((k17_euclid (k1_jordan18 X1 X0) = k17_euclid X1) \wedge (k17_euclid \\ & (k2_jordan18 X1 X0) = k17_euclid X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.(r2_zfmisc_1 X0 X1 \\ & X2 X3) \Leftrightarrow ((X0 \neq X1) \wedge ((X0 \neq X2) \wedge ((X0 \neq X3) \wedge ((X1 \neq X2) \wedge ((X1 \neq X3) \wedge (X2 \neq \\ & X3)))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X2.((v2_compts_1 X2 (k15_euclid np_2)) \wedge (m1_subset_1 \\ & X2 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow (((X0 \in k1_jordan2c \\ & np_2 X2) \wedge (X1 \in k1_jordan2c np_2 X2)) \Rightarrow ((k17_euclid X0 = k17_euclid \\ & X1) \vee (r2_zfmisc_1 (k1_jordan18 X0 X2) (k2_jordan18 X1 X2) (k1_jordan18 \\ & X1 X2) (k2_jordan18 X0 X2)))))) \end{aligned}$$