

t17_jordan17

(TMR8xedVZ2zSDQcZRwkMai3rFMLEXA12Tij)

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Let $v1_topreal2 : \iota \Rightarrow o$ 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 $r1_jordan17 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 \forall X0.((v1_topreal2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 \\
 (k15_euclid np_2)))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\
 (k15_euclid np_2))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 \\
 (k15_euclid np_2))) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\
 (k15_euclid np_2))) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 \\
 (k15_euclid np_2))) \Rightarrow (\neg(X1 \neq X2) \wedge ((r1_jordan17 X0 X3 X1 X2 X4) \wedge \\
 (\forall X5.(m1_subset_1 X5 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow \\
 (\neg(X5 \neq X1) \wedge (X5 \neq X2) \wedge (r1_jordan17 X0 X1 X5 X2 X4))))))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 \forall X0.((v1_topreal2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 \\
 (k15_euclid np_2)))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\
 (k15_euclid np_2))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 \\
 (k15_euclid np_2))) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\
 (k15_euclid np_2))) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 \\
 (k15_euclid np_2))) \Rightarrow ((r1_jordan17 X0 X1 X2 X3 X4) \Rightarrow (r1_jordan17 \\
 X0 X3 X4 X1 X2))))))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
 \forall X0.((v1_topreal2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 \\
 (k15_euclid np_2)))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\
 (k15_euclid np_2))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 \\
 (k15_euclid np_2))) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\
 (k15_euclid np_2))) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 \\
 (k15_euclid np_2))) \Rightarrow ((r1_jordan17 X0 X1 X2 X3 X4) \Rightarrow (r1_jordan17 \\
 X0 X2 X3 X4 X1))))))
 \end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_topreal2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 \\ & \quad (k15_euclid np_2)))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ & \quad (k15_euclid np_2))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 \\ & \quad (k15_euclid np_2))) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\ & \quad (k15_euclid np_2))) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 \\ & \quad (k15_euclid np_2))) \Rightarrow (\neg(X1 \neq X2) \wedge ((r1_jordan17 X0 X3 X4 X1 X2) \wedge \\ & \quad (\forall X5.(m1_subset_1 X5 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow \\ & \quad (\neg(X5 \neq X1) \wedge ((X5 \neq X2) \wedge (r1_jordan17 X0 X3 X1 X5 X2)))))))))) \end{aligned}$$