

t24_jordan18

(TMMWi81hPeg2Hfi3cqqzwH3HNyysKJ1NwGc)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ 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 $r1_jordan18 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 (k15_euclid X0)))) \Rightarrow (\forall X3.(\\ m1_subset_1 X3 (u1_struct_0 (k15_euclid X0))) \Rightarrow (\neg(r1_topreal1 \\ (k15_euclid X0) X2 X3 X1) \wedge (X2 = X3)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 (k15_euclid X0)))) \Rightarrow (\forall X3.(\\ m1_subset_1 X3 (u1_struct_0 (k15_euclid X0))) \Rightarrow (\forall X4.(m1_subset_1 \\ X4 (u1_struct_0 (k15_euclid X0))) \Rightarrow (\forall X5.(m1_subset_1 X5 \\ (u1_struct_0 (k15_euclid X0))) \Rightarrow ((r1_jordan18 X0 X1 X2 X3 X4 X5) \Leftrightarrow \\ (\forall X6.(m1_subset_1 X6 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ X0)))) \Rightarrow (\neg(r1_topreal1 (k15_euclid X0) X2 X3 X6) \wedge ((r1_tarski X6 \\ X1) \wedge (r1_xboole_0 X6 (k2_tarski X4 X5)))))))))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 (k15_euclid X0)))) \Rightarrow (\forall X3.(\\ m1_subset_1 X3 (u1_struct_0 (k15_euclid X0))) \Rightarrow (\forall X4.(m1_subset_1 \\ X4 (u1_struct_0 (k15_euclid X0))) \Rightarrow (r1_jordan18 X0 X1 X2 X2 X3 X4)))) \end{aligned}$$