

t19_jordan20
(TMas4yVeZzDcdf4ZJsdTFdNhFVzReSnTn4V)

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Let $v1_xboole_0 : \iota \Rightarrow o$ 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 $r1_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_jordan5c : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ np_2)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid \\ np_2))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid \\ np_2))) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 (k15_euclid \\ np_2))) \Rightarrow ((X3 \in X0) \Rightarrow (r1_jordan5c X0 X1 X2 X3 X3)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ np_2)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid \\ np_2))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid \\ np_2))) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 (k15_euclid \\ np_2))) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 (k15_euclid \\ np_2))) \Rightarrow (\neg(r1_topreal1 (k15_euclid np_2) X1 X2 X0) \wedge ((X3 \in X0) \wedge \\ ((X4 \in X0) \wedge (X3 \neq X4) \wedge (\neg(r1_jordan5c X0 X1 X2 X3 X4) \wedge (\neg r1_jordan5c \\ X0 X1 X2 X4 X3)) \wedge (\neg(r1_jordan5c X0 X1 X2 X4 X3) \wedge (\neg r1_jordan5c X0 X1 \\ X2 X3 X4)))))))))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (\\ u1_struct_0 (k15_euclid np_2)))))) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (\forall X2.(m1_subset_1 \\ X2 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (\forall X3.(m1_subset_1 \\ X3 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (\forall X4.(m1_subset_1 \\ X4 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (\neg(r1_topreal1 (k15_euclid \\ np_2) X1 X2 X0) \wedge ((X3 \in X0) \wedge ((X4 \in X0) \wedge (\neg r1_jordan5c X0 X1 X2 X3 X4) \wedge \\ (\neg r1_jordan5c X0 X1 X2 X4 X3)))))))))) \end{aligned}$$