

t45_euclid_4

(TMWKy96X6LWMkSjstiBYGmid6HFZ7R4Cghi)

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Let $v7_ordinal1 : \iota \Rightarrow o$ 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 $v2_euclid_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_euclid_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ (k15_euclid X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 (\\ k15_euclid X0))) \Rightarrow ((X1 \in k4_euclid_4 X0 X1 X2) \wedge (X2 \in k4_euclid_4 \\ X0 X1 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (u1_struct_0 (k15_euclid X0)))) \Rightarrow ((v2_euclid_4 X1 X0) \Leftrightarrow (\exists X2. \\ (m1_subset_1 X2 (u1_struct_0 (k15_euclid X0))) \wedge (\exists X3.(\\ m1_subset_1 X3 (u1_struct_0 (k15_euclid X0))) \wedge ((X2 \neq X3) \wedge (X1 = \\ k4_euclid_4 X0 X2 X3))))))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (u1_struct_0 (k15_euclid X0)))) \Rightarrow (\neg(v2_euclid_4 X1 X0) \wedge (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 (k15_euclid X0))) \Rightarrow (\forall X3.(\\ m1_subset_1 X3 (u1_struct_0 (k15_euclid X0))) \Rightarrow (\neg(X2 \in X1) \wedge ((X3 \in \\ X1) \wedge (X2 \neq X3)))))))) \end{aligned}$$