

t32_jgraph_5 (TMYCv-
VAusg7gRxZRkK8mLLMgjcq6ZWXmZvG)

October 27, 2020

Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $k3_topmetr : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k5_pscomp_1 : \iota$ be given. Let $v5_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k4_pscomp_1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & ((k7_partfun1 k1_numbers X0 np_1 = k3_funct_2 (u1_struct_0 (k15_euclid \\ & \quad np_2)) k1_numbers k4_pscomp_1 X0) \wedge (k7_partfun1 k1_numbers X0 \\ & \quad np_2 = k3_funct_2 (u1_struct_0 (k15_euclid np_2)) k1_numbers \\ & \quad k5_pscomp_1 X0)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((\\ & \quad X0 \in k2_finseq_1 X1) \Leftrightarrow ((r1_xxreal_0 np_1 X0) \wedge (r1_xxreal_0 X0 X1)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.((v1_funct_1 \\ & \quad X1) \wedge ((v1_funct_2 X1 (u1_struct_0 (k15_euclid X0)) (u1_struct_0 \\ & \quad k3_topmetr)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 \\ & \quad (k15_euclid X0)) (u1_struct_0 k3_topmetr)))))) \Rightarrow (\forall X2. \\ & \quad (m1_subset_1 X2 k5_numbers) \Rightarrow (((X2 \in k2_finseq_1 X0) \wedge (\forall X3. \\ & \quad (m1_subset_1 X3 (u1_struct_0 (k15_euclid X0))) \Rightarrow (k3_funct_2 (\\ & \quad u1_struct_0 (k15_euclid X0)) (u1_struct_0 k3_topmetr) X1 X3 = k7_partfun1 \\ & \quad k1_numbers X3 X2))) \Rightarrow (v5_pre_topc X1 (k15_euclid X0) k3_topmetr)))) \end{aligned} \tag{3}$$

Assume the following.

$$u1_struct_0 \ k3_topmetr = k1_numbers \quad (4)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_2) \wedge (m2_subset_1 \ np_2 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_2 \ k5_numbers) \wedge (m1_subset_1 \ np_2 \ k1_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$r1_xxreal_0 \ np_2 \ np_2 \quad (6)$$

Assume the following.

$$r1_xxreal_0 \ np_1 \ np_2 \quad (7)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k4_ordinal1) \Rightarrow (v7_ordinal1 \ X0) \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_funct_1 \ X0) \wedge ((v1_funct_2 \ X0 \ (u1_struct_0 \ (k15_euclid \\ & \quad np_2)) \ (u1_struct_0 \ k3_topmetr)) \wedge (m1_subset_1 \ X0 \ (k1_zfmisc_1 \\ & \quad (k2_zfmisc_1 \ (u1_struct_0 \ (k15_euclid \ np_2)) \ (u1_struct_0 \ k3_topmetr)))))) \Rightarrow \\ & \quad ((\forall X1.(m1_subset_1 \ X1 \ (u1_struct_0 \ (k15_euclid \ np_2))) \Rightarrow \\ & \quad (k3_funct_2 \ (u1_struct_0 \ (k15_euclid \ np_2)) \ (u1_struct_0 \ k3_topmetr) \\ & \quad \quad X0 \ X1 = k3_funct_2 \ (u1_struct_0 \ (k15_euclid \ np_2)) \ k1_numbers \\ & \quad \quad k5_pscomp_1 \ X1)) \Rightarrow (v5_pre_topc \ X0 \ (k15_euclid \ np_2) \ k3_topmetr)) \end{aligned}$$