

t65_pscomp_1
(TMQ921yAfNej7gk5umLd5jQNs6yi6Ki5ZkS)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_pscomp_1 : \iota$ be given. Let $k19_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_pscomp_1 : \iota$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. 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 $k1_numbers : \iota$ 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. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((k17_euclid (k19_euclid X0 X1) = X0) \wedge (k18_euclid (k19_euclid X0 X1) = X1))) \quad (1)$$

Assume the following.

$$(v1_funct_1 k5_pscomp_1) \wedge ((v1_funct_2 k5_pscomp_1 (u1_struct_0 (k15_euclid np_2)) k1_numbers) \wedge (m1_subset_1 k5_pscomp_1 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 (k15_euclid np_2)) k1_numbers)))) \quad (2)$$

Assume the following.

$$(v1_funct_1 k4_pscomp_1) \wedge ((v1_funct_2 k4_pscomp_1 (u1_struct_0 (k15_euclid np_2)) k1_numbers) \wedge (m1_subset_1 k4_pscomp_1 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 (k15_euclid np_2)) k1_numbers)))) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow (m1_subset_1 (k19_euclid X0 X1) (u1_struct_0 (k15_euclid np_2))) \quad (4)$$

Assume the following.

$$\forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 (u1_struct_0 (k15_euclid np_2)) k1_numbers) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 (k15_euclid np_2)) k1_numbers)))))) \Rightarrow ((X0 = k5_pscomp_1) \Leftrightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (k1_seq_1 X0 X1 = k18_euclid X1))) \quad (5)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 (u1_struct_0 (k15_euclid \\
& \quad np_2)) k1_numbers) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\
& \quad (u1_struct_0 (k15_euclid np_2)) k1_numbers)))))) \Rightarrow ((X0 = k4_pscomp_1) \Leftrightarrow \\
& \quad (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
& \quad \quad (k1_seq_1 X0 X1 = k17_euclid X1)))
\end{aligned} \tag{6}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((k1_seq_1 \\
& \quad k5_pscomp_1 (k19_euclid X0 X1) = X1) \wedge (k1_seq_1 k4_pscomp_1 (k19_euclid \\
& \quad \quad X0 X1) = X0)))
\end{aligned}$$