

t32_jordan1k
(TMJq26YV2skVytR331vaxZFsQK687FFNecT)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_jgraph_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_rlvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_rlvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k19_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k4_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Let $k7_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ & (k15_euclid np_2))) \Rightarrow (k1_rlvect_1 (k15_euclid np_2) X1 X0 = k19_euclid \\ & (k4_real_1 X0 (k17_euclid X1)) (k4_real_1 X0 (k18_euclid X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (k3_rlvect_1 (k15_euclid np_2) X0 X1 = k19_euclid (k7_real_1 (\\ & k17_euclid X0) (k17_euclid X1)) (k7_real_1 (k18_euclid X0) (k18_euclid \\ & X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((k17_euclid (k19_euclid X0 X1) = X0) \wedge (k18_euclid (k19_euclid X0 X1) = X1))) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1.(v1_xreal_0 X1) \Rightarrow ((k17_euclid (k1_rlvect_1 (k15_euclid \\ & np_2) X0 X1) = k4_real_1 X1 (k17_euclid X0)) \wedge (k18_euclid (k1_rlvect_1 \\ & (k15_euclid np_2) X0 X1) = k4_real_1 X1 (k18_euclid X0)))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0)\wedge(m1_subset_1 X1 k1_numbers))\Rightarrow (m1_subset_1 (k4_real_1 X0 X1) k1_numbers) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((v1_xreal_0 X0)\wedge \\ & ((v1_xreal_0 X1)\wedge((v1_xreal_0 X2)\wedge(v1_xreal_0 X3))))\Rightarrow((v1_funct_1 \\ & (k2_jgraph_2 X0 X1 X2 X3))\wedge((v1_funct_2 (k2_jgraph_2 X0 X1 X2 X3) \\ & (u1_struct_0 (k15_euclid np_2)) (u1_struct_0 (k15_euclid np_2))))\wedge \\ & (m1_subset_1 (k2_jgraph_2 X0 X1 X2 X3) (k1_zfmisc_1 (k2_zfmisc_1 \\ & (u1_struct_0 (k15_euclid np_2)) (u1_struct_0 (k15_euclid np_2)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0)\wedge(v1_xreal_0 X1))\Rightarrow(m1_subset_1 (k19_euclid X0 X1) (u1_struct_0 (k15_euclid np_2))) \quad (7)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2)))\Rightarrow (m1_subset_1 (k18_euclid X0) k1_numbers) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2)))\Rightarrow (m1_subset_1 (k17_euclid X0) k1_numbers) \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0)\Rightarrow(\forall X1.(v1_xreal_0 X1)\Rightarrow(\forall X2. \\ & (v1_xreal_0 X2)\Rightarrow(\forall X3.(v1_xreal_0 X3)\Rightarrow(\forall X4.((v1_funct_1 \\ & X4)\wedge((v1_funct_2 X4 (u1_struct_0 (k15_euclid np_2)) (u1_struct_0 \\ & (k15_euclid np_2))))\wedge(m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (u1_struct_0 (k15_euclid np_2)) (u1_struct_0 (k15_euclid np_2))))))\Rightarrow \\ & ((X4 = k2_jgraph_2 X0 X1 X2 X3)\Leftrightarrow(\forall X5.(m1_subset_1 X5 (u1_struct_0 \\ & (k15_euclid np_2)))\Rightarrow(k3_funct_2 (u1_struct_0 (k15_euclid np_2)) \\ & (u1_struct_0 (k15_euclid np_2)) X4 X5 = k19_euclid (k7_real_1 \\ & (k4_real_1 X0 (k17_euclid X5)) X1) (k7_real_1 (k4_real_1 X2 (k18_euclid \\ & X5)) X3)))))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0)\wedge(m1_subset_1 X1 k1_numbers))\Rightarrow (k4_real_1 X0 X1 = k4_real_1 X1 X0) \quad (11)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(v1_xreal_0 X0) \quad (12)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 k1_numbers) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 k1_numbers) \Rightarrow (\forall X3.(m1_subset_1 X3 k1_numbers) \Rightarrow (k3_funct_2 \\ & (u1_struct_0 (k15_euclid np_2)) (u1_struct_0 (k15_euclid np_2)) \\ & (k2_jgraph_2 X1 X2 X1 X3) X0 = k3_rlvect_1 (k15_euclid np_2) (k1_rlvect_1 \\ & (k15_euclid np_2) X0 X1) (k19_euclid X2 X3)))))) \end{aligned}$$