

t7_jgraph_7
(TMWadSc1e7ZdjkdwjqauNGXGJfaAreiLgjF)

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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 $v1_xreal.0 : \iota \Rightarrow o$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Let $r1_xxreal.0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $r1_jordan6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_sppol.2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_rltopsp1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k19_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xxreal.0 : \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal.0 X0) \Rightarrow (\forall X1.(v1_xreal.0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal.0 X2) \Rightarrow (\forall X3.(v1_xreal.0 X3) \Rightarrow (\forall X4.(m1_subset.1 \\ & X4 (u1_struct.0 (k15_euclid np_2)))) \Rightarrow (\forall X5.(m1_subset.1 \\ & X5 (u1_struct.0 (k15_euclid np_2)))) \Rightarrow (((X4 \in k1_rltopsp1 (k15_euclid \\ & np_2) (k19_euclid X0 X3) (k19_euclid X1 X3)) \wedge (X5 \in k1_rltopsp1 \\ & (k15_euclid np_2) (k19_euclid X0 X3) (k19_euclid X1 X3))) \Rightarrow ((r1_xxreal.0 \\ & X1 X0) \vee ((r1_xxreal.0 X3 X2) \vee ((r1_jordan6 (k1_sppol.2 X0 X1 X2 X3) \\ & X4 X5) \Leftrightarrow (r1_xxreal.0 (k17_euclid X4) (k17_euclid X5)))))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal.0 X0) \Rightarrow (\forall X1.(v1_xxreal.0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal.0 X2) \Rightarrow (((r1_xxreal.0 X0 X1) \wedge (r1_xxreal.0 X1 X2)) \Rightarrow \\ & (r1_xxreal.0 X0 X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal.0 X0) \Rightarrow (\forall X1.(v1_xreal.0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal.0 X2) \Rightarrow (\forall X3.(m1_subset.1 X3 (u1_struct.0 (k15_euclid \\ & np_2)))) \Rightarrow (((k18_euclid X3 = X2) \wedge ((r1_xxreal.0 X0 (k17_euclid \\ & X3)) \wedge (r1_xxreal.0 (k17_euclid X3) X1))) \Rightarrow ((r1_xxreal.0 X1 X0) \vee \\ & (X3 \in k1_rltopsp1 (k15_euclid np_2) (k19_euclid X0 X2) (k19_euclid \\ & X1 X2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset.1 X0 (u1_struct.0 (k15_euclid np_2))) \Rightarrow \\ & (m1_subset.1 (k17_euclid X0) k1_numbers) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1.xxreal_0 X0)\wedge(v1.xxreal_0 X1))\Rightarrow((r1.xxreal_0 X0 X1)\vee(r1.xxreal_0 X1 X0)) \quad (5)$$

Assume the following.

$$\forall X0.(v1.xreal_0 X0)\Rightarrow(v1.xxreal_0 X0) \quad (6)$$

Assume the following.

$$\forall X0.(m1.subset_1 X0 k1.numbers)\Rightarrow(v1.xreal_0 X0) \quad (7)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1.subset_1 X0 (u1.struct_0 (k15.euclid np_2)))\Rightarrow \\ & (\forall X1.(m1.subset_1 X1 (u1.struct_0 (k15.euclid np_2)))\Rightarrow \\ & (\forall X2.(v1.xreal_0 X2)\Rightarrow(\forall X3.(v1.xreal_0 X3)\Rightarrow(\forall X4. \\ & (v1.xreal_0 X4)\Rightarrow(\forall X5.(v1.xreal_0 X5)\Rightarrow(((k18.euclid X0 = \\ & X5)\wedge((k18.euclid X1 = X5)\wedge((r1.xxreal_0 X2 (k17.euclid X0))\wedge(\\ & r1.xxreal_0 (k17.euclid X1) X3))))))\Rightarrow((r1.xxreal_0 X3 X2)\vee((r1.xxreal_0 \\ & X5 X4)\vee((r1.xxreal_0 (k17.euclid X1) (k17.euclid X0))\vee(r1.jordan6 \\ & (k1.sppol_2 X2 X3 X4 X5) X0 X1)))))))))) \end{aligned}$$