

t36_afvect0
(TMbKQdnbCF2zDdS5hGZngMotoufACb46fTp)

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Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v1_afvect0 : \iota \Rightarrow o$ be given. Let $l1_analoaf : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_afvect0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_afvect0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_afvect0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_afvect0 X0) \wedge (l1_analoaf \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\ & (\forall X5.(m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (((r2_afvect0 \\ & X0 X1 X2 X3) \wedge ((r2_afvect0 X0 X1 X4 X5) \wedge (r1_afvect0 X0 X2 X4))) \Rightarrow (X3 = \\ & X5))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_afvect0 X0) \wedge (l1_analoaf \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\ & (\neg (r2_afvect0 X0 X1 X2 X3) \wedge ((r2_afvect0 X0 X1 X4 X3) \wedge ((X2 \neq X4) \wedge (\\ & \neg r1_afvect0 X0 X2 X4)))))))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v7_struct_0 X0) \wedge ((v1_afvect0 \\ & X0) \wedge (l1_analoaf X0))) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge (m1_subset_1 \\ & X2 (u1_struct_0 X0)))) \Rightarrow ((r1_afvect0 X0 X1 X2) \Rightarrow (r1_afvect0 X0 X2 \\ & X1)) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v7_struct_0 X0)\wedge((v1_afvect0 X0)\wedge(l1_analoaf X0)))\wedge((m1_subset_1 X1 (u1_struct_0 X0))\wedge(m1_subset_1 X2 (u1_struct_0 X0))))\Rightarrow(m1_subset_1 (k1_afvect0 X0 X1 X2) (u1_struct_0 X0)) \quad (4)$$

Assume the following.

$$\forall X0.(((\neg v7_struct_0 X0)\wedge((v1_afvect0 X0)\wedge(l1_analoaf X0)))\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow(\forall X2.(m1_subset_1 X2 (u1_struct_0 X0))\Rightarrow(\forall X3.(m1_subset_1 X3 (u1_struct_0 X0))\Rightarrow((X3 = k1_afvect0 X0 X1 X2)\Leftrightarrow(r2_afvect0 X0 X2 X1 X3)))))) \quad (5)$$

Theorem 1

$$\forall X0.(((\neg v7_struct_0 X0)\wedge((v1_afvect0 X0)\wedge(l1_analoaf X0)))\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow(\forall X2.(m1_subset_1 X2 (u1_struct_0 X0))\Rightarrow(\forall X3.(m1_subset_1 X3 (u1_struct_0 X0))\Rightarrow((k1_afvect0 X0 X1 X2 = k1_afvect0 X0 X3 X2)\Leftrightarrow((X1 = X3)\vee(r1_afvect0 X0 X1 X3))))))))$$