

t37_afvect0
(TMNYq6V6VDQfdUDu276ZffvizSbKdEW7ori)

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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 $r2_afvect0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_afvect0 X0) \wedge (l1_analoaf \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\ & ((r2_afvect0 X0 X1 X2 X3) \Leftrightarrow (r2_afvect0 X0 (k1_afvect0 X0 X4 X1) (k1_afvect0 \\ & X0 X4 X2) (k1_afvect0 X0 X4 X3)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_afvect0 X0) \wedge (l1_analoaf \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (k1_afvect0 X0 X1 (k1_afvect0 \\ & X0 X1 X2) = X2))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v7_struct_0 X0) \wedge ((v1_afvect0 \\ & X0) \wedge (l1_analoaf X0))) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge (m1_subset_1 \\ & X2 (u1_struct_0 X0)))) \Rightarrow (m1_subset_1 (k1_afvect0 X0 X1 X2) (u1_struct_0 \\ & X0)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_afvect0 X0) \wedge (l1_analoaf \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow ((X3 = k1_afvect0 X0 X1 X2) \Leftrightarrow (r2_afvect0 X0 X2 \\ & X1 X3)))) \end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v7_struct_0 X0) \wedge ((v1_afvect0 X0) \wedge (l1_analoaf \\ & X0))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow (k1_afvect0 X0 X1 (k1_afvect0 X0 X2 (k1_afvect0 \\ & X0 X1 X3)) = k1_afvect0 X0 (k1_afvect0 X0 X1 X2) X3)))) \end{aligned}$$