

# t40\_afvect0 (TMXkgXXPY- icwHkFnVM27gGe5pyjLNgM9Ttt)

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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.

$$\begin{aligned} & \forall X0. ((\neg v7\_struct\_0 X0) \wedge ((v1\_afvect0 X0) \wedge (l1\_analoaf \\ & X0))) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\exists X3. (m1\_subset\_1 X3 \\ & (u1\_struct\_0 X0)) \wedge (r2\_afvect0 X0 X1 X3 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v7\_struct\_0 X0) \wedge ((v1\_afvect0 \\ & X0) \wedge (l1\_analoaf X0))) \wedge ((m1\_subset\_1 X1 (u1\_struct\_0 X0)) \wedge (m1\_subset\_1 \\ & X2 (u1\_struct\_0 X0)))) \Rightarrow (m1\_subset\_1 (k1\_afvect0 X0 X1 X2) (u1\_struct\_0 \\ & X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v7\_struct\_0 X0) \wedge ((v1\_afvect0 X0) \wedge (l1\_analoaf \\ & X0))) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3. (m1\_subset\_1 X3 \\ & (u1\_struct\_0 X0)) \Rightarrow ((X3 = k1\_afvect0 X0 X1 X2) \Leftrightarrow (r2\_afvect0 X0 X2 \\ & X1 X3)))))) \end{aligned} \quad (3)$$

## Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v7\_struct\_0 X0) \wedge ((v1\_afvect0 X0) \wedge (l1\_analoaf \\ & X0))) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3. (m1\_subset\_1 X3 \\ & (u1\_struct\_0 X0)) \Rightarrow (\forall X4. (m1\_subset\_1 X4 (u1\_struct\_0 X0)) \Rightarrow \\ & (\exists X5. (m1\_subset\_1 X5 (u1\_struct\_0 X0)) \wedge (k1\_afvect0 X0 \\ & X1 (k1\_afvect0 X0 X2 (k1\_afvect0 X0 X3 X4)) = k1\_afvect0 X0 X5 X4)))))) \end{aligned}$$