

t22\_analoaf (TMT-  
BVV796zXXztC8ik2jAThkV6eT1UzdRmb)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v13\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v2\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v3\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v4\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v5\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v6\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v7\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v8\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $l1\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_analoaf : \iota \Rightarrow \iota$  be given. Let  $r1\_analoaf : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1\_xboole\_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \neg (X0 \in X1) \wedge ((m1\_subset\_1 X1 (k1\_zfmisc\_1 X2)) \wedge (v1\_xboole\_0 X2)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. (k4\_tarski X0 X1 = k4\_tarski X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge ((m1\_subset\_1 X2 X0) \wedge (m1\_subset\_1 X3 X1)))) \Rightarrow (k1\_domain\_1 X0 X1 X2 X3 = k4\_tarski X2 X3) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (v1\_xboole\_0 X0) \Rightarrow (v1\_xboole\_0 (k2\_zfmisc\_1 X0 X1)) \quad (5)$$

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$$\forall X0. \forall X1. (v1\_xboole\_0 X1) \Rightarrow (v1\_xboole\_0 (k2\_zfmisc\_1 X0 X1)) \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1\_xboole\_0 X0) \wedge \\ & ((\neg v1\_xboole\_0 X1) \wedge ((m1\_subset\_1 X2 X0) \wedge (m1\_subset\_1 X3 X1)))) \Rightarrow \\ & (m1\_subset\_1 (k1\_domain\_1 X0 X1 X2 X3) (k2\_zfmisc\_1 X0 X1)) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 X0) \wedge ((v2\_rlvect\_1 \\ & X0) \wedge ((v3\_rlvect\_1 X0) \wedge ((v4\_rlvect\_1 X0) \wedge ((v5\_rlvect\_1 X0) \wedge \\ & ((v6\_rlvect\_1 X0) \wedge ((v7\_rlvect\_1 X0) \wedge ((v8\_rlvect\_1 X0) \wedge (l1\_rlvect\_1 \\ & X0)))))))))) \Rightarrow (m1\_subset\_1 (k1\_analoaf X0) (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0)) (k2\_zfmisc\_1 \\ & (u1\_struct\_0 X0) (u1\_struct\_0 X0)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 X0) \wedge ((v2\_rlvect\_1 \\ & X0) \wedge ((v3\_rlvect\_1 X0) \wedge ((v4\_rlvect\_1 X0) \wedge ((v5\_rlvect\_1 X0) \wedge \\ & ((v6\_rlvect\_1 X0) \wedge ((v7\_rlvect\_1 X0) \wedge ((v8\_rlvect\_1 X0) \wedge (l1\_rlvect\_1 \\ & X0)))))))))) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0)) (k2\_zfmisc\_1 \\ & (u1\_struct\_0 X0) (u1\_struct\_0 X0)))))) \Rightarrow ((X1 = k1\_analoaf X0) \Leftrightarrow ( \\ & \forall X2. \forall X3. (k4\_tarski X2 X3 \in X1) \Leftrightarrow (\exists X4. (m1\_subset\_1 \\ & X4 (u1\_struct\_0 X0)) \wedge (\exists X5. (m1\_subset\_1 X5 (u1\_struct\_0 \\ & X0)) \wedge (\exists X6. (m1\_subset\_1 X6 (u1\_struct\_0 X0)) \wedge (\exists X7. \\ & (m1\_subset\_1 X7 (u1\_struct\_0 X0)) \wedge ((X2 = k1\_domain\_1 (u1\_struct\_0 \\ & X0) (u1\_struct\_0 X0) X4 X5) \wedge ((X3 = k1\_domain\_1 (u1\_struct\_0 X0) \\ & (u1\_struct\_0 X0) X6 X7) \wedge (r1\_analoaf X0 X4 X5 X6 X7)))))))))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0. \forall X1. (v1\_xboole\_0 X0) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 X0))) \Rightarrow (v1\_xboole\_0 X2)) \quad (10)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 X0) \wedge ((v2\_rlvect\_1 \\ & X0) \wedge ((v3\_rlvect\_1 X0) \wedge ((v4\_rlvect\_1 X0) \wedge ((v5\_rlvect\_1 X0) \wedge \\ & ((v6\_rlvect\_1 X0) \wedge ((v7\_rlvect\_1 X0) \wedge ((v8\_rlvect\_1 X0) \wedge (l1\_rlvect\_1 \\ & X0)))))))))) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow \\ & (\forall X2. (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3. (m1\_subset\_1 \\ & X3 (u1\_struct\_0 X0)) \Rightarrow (\forall X4. (m1\_subset\_1 X4 (u1\_struct\_0 \\ & X0)) \Rightarrow ((k1\_domain\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 \\ & X0)) (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0)) (k1\_domain\_1 \\ & (u1\_struct\_0 X0) (u1\_struct\_0 X0) X1 X2) (k1\_domain\_1 (u1\_struct\_0 \\ & X0) (u1\_struct\_0 X0) X3 X4) \in k1\_analoaf X0) \Leftrightarrow (r1\_analoaf X0 X1 X2 \\ & X3 X4)))))) \end{aligned}$$