

t65\_yellow\_0  
(TMPU9g5whNVdVM99EVTsu1D6zzqmbgu34zc)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v4\_orders\_2 : \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v4\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $r2\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v4\_orders\_2 X0) \wedge (l1\_orders\_2 \\ & X0))) \Rightarrow (\forall X1. ((\neg v2\_struct\_0 X1) \wedge ((v4\_yellow\_0 X1 X0) \wedge ( \\ & m1\_yellow\_0 X1 X0))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (u1\_struct\_0 X1))) \Rightarrow (((r2\_yellow\_0 X0 X2) \wedge (k2\_yellow\_0 X0 X2 \in \\ & u1\_struct\_0 X1)) \Rightarrow ((r2\_yellow\_0 X1 X2) \wedge (k2\_yellow\_0 X1 X2 = k2\_yellow\_0 \\ & X0 X2)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1\_xboole\_0 X0) \wedge ((m1\_subset\_1 \\ & X1 X0) \wedge (m1\_subset\_1 X2 X0))) \Rightarrow (m1\_subset\_1 (k7\_domain\_1 X0 X1 X2) \\ & (k1\_zfmisc\_1 X0)) \end{aligned} \quad (3)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v4\_orders\_2 X0) \wedge (l1\_orders\_2 \\ & X0))) \Rightarrow (\forall X1. ((\neg v2\_struct\_0 X1) \wedge ((v4\_yellow\_0 X1 X0) \wedge ( \\ & m1\_yellow\_0 X1 X0))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (u1\_struct\_0 \\ & X1)) \Rightarrow (\forall X3. (m1\_subset\_1 X3 (u1\_struct\_0 X1)) \Rightarrow (((r2\_yellow\_0 \\ & X0 (k7\_domain\_1 (u1\_struct\_0 X1) X2 X3)) \wedge (k2\_yellow\_0 X0 (k7\_domain\_1 \\ & (u1\_struct\_0 X1) X2 X3) \in u1\_struct\_0 X1)) \Rightarrow ((r2\_yellow\_0 X1 (k7\_domain\_1 \\ & (u1\_struct\_0 X1) X2 X3)) \wedge (k2\_yellow\_0 X1 (k7\_domain\_1 (u1\_struct\_0 \\ & X1) X2 X3) = k2\_yellow\_0 X0 (k7\_domain\_1 (u1\_struct\_0 X1) X2 X3))))))))) \end{aligned}$$