

t54\_yellow\_9  
(TMbW4Qkqb2p5KSfU9BLL8S2oPySor48iHfg)

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Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $m3\_yellow\_9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $g1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $u1\_pre\_topc : \iota \Rightarrow \iota$  be given. Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v1\_tops\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_cantor\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (\forall X1. \\ & ((v2\_pre\_topc X1) \wedge (l1\_pre\_topc X1)) \Rightarrow (\forall X2.((v1\_tops\_2 \\ X2 X0) \wedge ((v2\_cantor\_1 X2 X0) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ (u1\_struct\_0 X0)))))) \Rightarrow (((u1\_struct\_0 X0 = u1\_struct\_0 X1) \wedge (( \\ v1\_tops\_2 X2 X1) \wedge ((v2\_cantor\_1 X2 X1) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ (k1\_zfmisc\_1 (u1\_struct\_0 X1)))))) \Rightarrow (u1\_pre\_topc X0 = u1\_pre\_topc \\ X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((l1\_pre\_topc X0) \wedge (l1\_pre\_topc X1)) \Rightarrow ( \\ & \forall X2. (m3\_yellow\_9 X2 X0 X1) \Rightarrow ((v2\_pre\_topc X2) \wedge (l1\_pre\_topc \\ X2))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1\_pre\_topc X0) \Rightarrow (\forall X1. (l1\_pre\_topc X1) \Rightarrow (\forall X2. \\ & ((v2\_pre\_topc X2) \wedge (l1\_pre\_topc X2)) \Rightarrow ((m3\_yellow\_9 X2 X0 X1) \Leftrightarrow \\ & ((u1\_struct\_0 X2 = k2\_xboole\_0 (u1\_struct\_0 X0) (u1\_struct\_0 X1)) \wedge \\ & ((v1\_tops\_2 (k2\_xboole\_0 (u1\_pre\_topc X0) (u1\_pre\_topc X1)) X2) \wedge \\ & ((v2\_cantor\_1 (k2\_xboole\_0 (u1\_pre\_topc X0) (u1\_pre\_topc X1)) \\ X2) \wedge (m1\_subset\_1 (k2\_xboole\_0 (u1\_pre\_topc X0) (u1\_pre\_topc \\ X1)) (k1\_zfmisc\_1 (k1\_zfmisc\_1 (u1\_struct\_0 X2)))))))))) \end{aligned} \tag{3}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. (l1\_pre\_topc X0) \Rightarrow (\forall X1. (l1\_pre\_topc X1) \Rightarrow (\forall X2. \\ & (m3\_yellow\_9 X2 X0 X1) \Rightarrow (\forall X3. (m3\_yellow\_9 X3 X0 X1) \Rightarrow (g1\_pre\_topc \\ & (u1\_struct\_0 X2) (u1\_pre\_topc X2) = g1\_pre\_topc (u1\_struct\_0 X3) \\ & (u1\_pre\_topc X3)))))) \end{aligned}$$