

l45\_tops\_1 (TM-  
RrSKx5SMRY8713DGXbsRVysL73fAbUE5w)

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Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_tops\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v4\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (((v4\_pre\_topc X1 X0) \Rightarrow (k2\_pre\_topc X0 X1 = X1)) \wedge (((v2\_pre\_topc X0) \wedge (k2\_pre\_topc X0 X1 = X1)) \Rightarrow (v4\_pre\_topc X1 X0)))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) \Rightarrow (v4\_pre\_topc (k2\_tops\_1 X0 X1) X0) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(((l1\_pre\_topc X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) \Rightarrow (m1\_subset\_1 (k2\_tops\_1 X0 X1) (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \quad (3)$$

**Theorem 1**

$$\forall X0.((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (k2\_pre\_topc X0 (k2\_tops\_1 X0 X1) = k2\_tops\_1 X0 X1))$$