

## t25\_yellow\_1

(TMZr3MdhG7Xcd3c4nqJro23gLFpqRENh9MU)

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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  $v1\_tops\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_yellow\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_pre\_topc : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $g1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v1\_relat\_2 : \iota \Rightarrow o$  be given. Let  $k1\_yellow\_1 : \iota \Rightarrow \iota$  be given. Let  $v4\_relat\_2 : \iota \Rightarrow o$  be given. Let  $v8\_relat\_2 : \iota \Rightarrow o$  be given. Let  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_orders\_2 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) \Rightarrow ((v1\_tops\_2 X1 X0) \Leftrightarrow (r1\_tarski X1 (u1\_pre\_topc X0)))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X0 (k1\_zfmisc\_1 X1)) \Leftrightarrow (r1\_tarski X0 X1) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0))) \Rightarrow (\forall X2.\forall X3.(g1\_orders\_2 X0 X1 = g1\_orders\_2 X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \quad (3)$$

Assume the following.

$$\forall X0.(v1\_orders\_2 (k2\_yellow\_1 X0)) \wedge (l1\_orders\_2 (k2\_yellow\_1 X0)) \quad (4)$$

Assume the following.

$$\forall X0.(v1\_relat\_2 (k1\_yellow\_1 X0)) \wedge ((v4\_relat\_2 (k1\_yellow\_1 X0)) \wedge (v8\_relat\_2 (k1\_yellow\_1 X0)) \wedge ((v1\_partfun1 (k1\_yellow\_1 X0) X0) \wedge (m1\_subset\_1 (k1\_yellow\_1 X0) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0)))))) \quad (5)$$

Assume the following.

$$\forall X0. k2\_yellow\_1 X0 = g1\_orders\_2 X0 (k1\_yellow\_1 X0) \quad (6)$$

Assume the following.

$$\forall X0. (l1\_orders\_2 X0) \Rightarrow ((v1\_orders\_2 X0) \Rightarrow (X0 = g1\_orders\_2 (u1\_struct\_0 X0) (u1\_orders\_2 X0))) \quad (7)$$

**Theorem 1**

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