

t1\_yellow21  
(TMGvqLyVEebtrmr1cwQtf2nwpRipiPE3J75)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v2\_altcat\_1 : \iota \Rightarrow o$  be given. Let  $v11\_altcat\_1 : \iota \Rightarrow o$  be given. Let  $v12\_altcat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_yellow21 : \iota \Rightarrow o$  be given. Let  $l2\_altcat\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k3\_yellow18 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_yellow21 : \iota \Rightarrow \iota$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $g1\_struct\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v2\_altcat\_1 X0) \wedge ((v11\_altcat\_1 \\ & X0) \wedge ((v12\_altcat\_1 X0) \wedge (l2\_altcat\_1 X0)))) \Rightarrow ((v1\_yellow21 \\ & X0) \Leftrightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\exists X2. \\ & (l1\_struct\_0 X2) \wedge ((X1 = X2) \wedge (k3\_yellow18 X0 X1 = u1\_struct\_0 X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. ((l1\_struct\_0 X0) \Rightarrow (k1\_yellow21 X0 = X0)) \wedge ((\neg l1\_struct\_0 X0) \Rightarrow (k1\_yellow21 X0 = g1\_struct\_0 X0)) \quad (2)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v2\_altcat\_1 X0) \wedge ((v11\_altcat\_1 \\ & X0) \wedge ((v12\_altcat\_1 X0) \wedge ((v1\_yellow21 X0) \wedge (l2\_altcat\_1 X0)))))) \Rightarrow \\ & (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (k3\_yellow18 X0 \\ & X1 = u1\_struct\_0 (k1\_yellow21 X1))) \end{aligned}$$