

t124\_xcmlx\_1  
(TMWG6gZNEVQNoNCn5nezA3oGsVd2btAH2Ro)

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Let  $v1\_xcmlx\_0 : \iota \Rightarrow o$  be given. Let  $k7\_xcmlx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_xcmlx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xcmlx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xcmlx\_0 X0) \Rightarrow (\forall X1.(v1\_xcmlx\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xcmlx\_0 X2) \Rightarrow (k2\_xcmlx\_0 (k7\_xcmlx\_0 X0 X1) (k7\_xcmlx\_0 \\ & X2 X1) = k7\_xcmlx\_0 (k2\_xcmlx\_0 X0 X2) X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xcmlx\_0 X0) \Rightarrow (\forall X1.(v1\_xcmlx\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xcmlx\_0 X2) \Rightarrow (k6\_xcmlx\_0 (k7\_xcmlx\_0 X0 X1) (k7\_xcmlx\_0 \\ & X2 X1) = k7\_xcmlx\_0 (k6\_xcmlx\_0 X0 X2) X1))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmlx\_0 X0) \wedge (v1\_xcmlx\_0 X1)) \Rightarrow (v1\_xcmlx\_0 (k2\_xcmlx\_0 X0 X1)) \quad (3)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v1\_xcmlx\_0 X0) \Rightarrow (\forall X1.(v1\_xcmlx\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xcmlx\_0 X2) \Rightarrow (\forall X3.(v1\_xcmlx\_0 X3) \Rightarrow (k7\_xcmlx\_0 \\ & (k6\_xcmlx\_0 (k2\_xcmlx\_0 X0 X1) X2) X3 = k6\_xcmlx\_0 (k2\_xcmlx\_0 \\ & (k7\_xcmlx\_0 X0 X3) (k7\_xcmlx\_0 X1 X3)) (k7\_xcmlx\_0 X2 X3)))))) \end{aligned}$$