

t46\_modal\_1 (TM-  
RaKdQELp6e1WfdbjHQ7GHD2xVREjbT7LR)

October 27, 2020

Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_modal\_1 : \iota$  be given. Let  $k6\_modal\_1 : \iota$  be given. Let  $k17\_modal\_1 : \iota$  be given. Let  $k16\_modal\_1 : \iota \Rightarrow \iota$  be given. Let  $k10\_modal\_1 : \iota \Rightarrow \iota$  be given. Let  $k11\_modal\_1 : \iota \Rightarrow \iota$  be given. Let  $k12\_modal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k3\_modal\_1) \Rightarrow (k17\_modal\_1 \neq k16\_modal\_1 X0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k6\_modal\_1) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 k6\_modal\_1) \Rightarrow ((k17\_modal\_1 \neq k10\_modal\_1 X0) \wedge ((k17\_modal\_1 \neq \\ & k11\_modal\_1 X0) \wedge (k17\_modal\_1 \neq k12\_modal\_1 X0 X1)))) \quad (2) \end{aligned}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k3\_modal\_1) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 k6\_modal\_1) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k6\_modal\_1) \Rightarrow ((k17\_modal\_1 \neq \\ & k16\_modal\_1 X0) \wedge ((k17\_modal\_1 \neq k10\_modal\_1 X1) \wedge ((k17\_modal\_1 \neq \\ & k11\_modal\_1 X1) \wedge (k17\_modal\_1 \neq k12\_modal\_1 X1 X2)))))) \end{aligned}$$