

## l158\_modelc\_2

(TMLSmosds41jmv61pzDoFFtYa9jZwNsFhVA)

October 27, 2020

Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k30\_modelc\_1 : \iota \Rightarrow \iota$  be given. Let  $r2\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_margrel1 : \iota$  be given. Let  $k31\_modelc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_margrel1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_margrel1 : \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (((v1\_funct\_1 X2) \wedge \\ & ((v1\_funct\_2 X2 X0 X1) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & X0 X1)))))) \wedge ((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 X0 X1) \wedge (m1\_subset\_1 \\ & X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))))) \Rightarrow ((r2\_funct\_2 X0 X1 X2 \\ & X3) \Leftrightarrow (X2 = X3)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (\neg v1\_xboole\_0 X0) \Rightarrow ((v1\_funct\_1 (k31\_modelc\_1 \\ & X0 X1)) \wedge ((v1\_funct\_2 (k31\_modelc\_1 X0 X1) X0 k6\_margrel1) \wedge (m1\_subset\_1 \\ & (k31\_modelc\_1 X0 X1) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 k6\_margrel1)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. ((X1 \in k30\_modelc\_1 \\ & X0) \Rightarrow (k31\_modelc\_1 X0 X1 = X1)) \wedge ((\neg X1 \in k30\_modelc\_1 X0) \Rightarrow (k31\_modelc\_1 \\ & X0 X1 = k1\_margrel1 k6\_margrel1 X0 k7\_margrel1))) \end{aligned} \tag{3}$$

### Theorem 1

$$\begin{aligned} & \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. \forall X2. ((X1 \in k30\_modelc\_1 \\ & X0) \wedge ((X2 \in k30\_modelc\_1 X0) \wedge (r2\_funct\_2 X0 k6\_margrel1 (k31\_modelc\_1 \\ & X0 X1) (k31\_modelc\_1 X0 X2)))) \Rightarrow (X1 = X2)) \end{aligned}$$