

t46\_supinf\_2  
(TMHfp7MbGAWGpYfeHRR7BuBLzDy7NWTSDQt)

October 27, 2020

Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k7\_numbers : \iota$  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  $v6\_supinf\_2 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k12\_supinf\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_supinf\_1 : \iota$  be given. Let  $v7\_supinf\_2 : \iota \Rightarrow o$  be given. Let  $k19\_supinf\_2 : \iota \Rightarrow \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k1\_xxreal\_0 : \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. ((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k7\_numbers) \wedge \\ & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k7\_numbers)))))) \Rightarrow \\ & ((v6\_supinf\_2 X0) \Rightarrow ((\forall X1. (m2\_subset\_1 X1 k1\_numbers k5\_numbers) \Rightarrow \\ & (k12\_supinf\_2 X0 X1 \neq k1\_supinf\_1))) \vee (k19\_supinf\_2 X0 = k1\_supinf\_1))) \end{aligned} \quad (1)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (2)$$

Assume the following.

$$k1\_supinf\_1 = k1\_xxreal\_0 \quad (3)$$

Assume the following.

$$k1\_xxreal\_0 = k1\_numbers \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k7\_numbers) \wedge \\ & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k7\_numbers)))))) \Rightarrow \\ & ((v7\_supinf\_2 X0) \Leftrightarrow (k19\_supinf\_2 X0 \in k1\_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (\neg X1 \in X0) \quad (6)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k7\_numbers) \wedge \\ & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k7\_numbers)))))) \Rightarrow \\ & (\neg(v6\_supinf\_2 X0) \wedge ((\exists X1.(m2\_subset\_1 X1 k1\_numbers k5\_numbers) \wedge \\ & (k12\_supinf\_2 X0 X1 = k1\_supinf\_1)) \wedge (v7\_supinf\_2 X0))) \end{aligned}$$