

# t51\_flang\_3

(TMH1KbxbkS9PAzEwCyUx6d7zKzvgsRdaxUc)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k8\_afinsq\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_flang\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k1\_flang\_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k3\_catalan2 : \iota \Rightarrow \iota$  be given. Let  $k7\_flang\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k8\_afinsq\_1 X0))) \Rightarrow (k2\_flang\_3 X0 X1 = k1\_flang\_3 X0 X1 np\_1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k8\_afinsq\_1 X0))) \Rightarrow (\forall X2. (v7\_ordinal1 X2) \Rightarrow ((k1\_flang\_3 X0 X1 X2 = k1\_xboole\_0) \Leftrightarrow ((\neg r1\_xxreal\_0 X2 k6\_numbers) \wedge (X1 = k1\_xboole\_0)))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k3\_catalan2 X0))) \Rightarrow (\forall X2. (v7\_ordinal1 X2) \Rightarrow ((k7\_flang\_1 X0 X1 X2 = k1\_xboole\_0) \Leftrightarrow ((\neg r1\_xxreal\_0 X2 k6\_numbers) \wedge (X1 = k1\_xboole\_0)))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k3\_catalan2 X0))) \Rightarrow (k7\_flang\_1 X0 X1 np\_1 = X1) \quad (4)$$

Assume the following.

$$((v2\_xxreal\_0 np\_1) \wedge (m2\_subset\_1 np\_1 k1\_numbers k5\_numbers)) \wedge ((m1\_subset\_1 np\_1 k5\_numbers) \wedge (m1\_subset\_1 np\_1 k1\_numbers)) \quad (5)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (6)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (7)$$

Assume the following.

$$\forall X0.k3\_catalan2\ X0 = k8\_afinsq\_1\ X0 \quad (8)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1) \Rightarrow (v7\_ordinal1\ X0) \quad (9)$$

**Theorem 1**

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k8\_afinsq\_1\ X0))) \Rightarrow ((k2\_flang\_3\ X0\ X1 = k1\_xboole\_0) \Leftrightarrow (X1 = k1\_xboole\_0))$$