

## t37\_flang\_1

(TMZ3GQqJpXE1Uv9PgbxChc5v3BR5yB6S9Pi)

October 27, 2020

Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k3\_catalan2 : \iota \Rightarrow \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_flang\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k4\_flang\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_flang\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k6\_flang\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  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  $k1\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k3\_catalan2 X0))) \Rightarrow (k7\_flang\_1 X0 X1 k6\_numbers = k4\_flang\_1 X0 (k2\_flang\_1 X0)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k3\_catalan2 X0))) \Rightarrow (\forall X2. (v7\_ordinal1 X2) \Rightarrow (k7\_flang\_1 X0 X1 (k2\_xcmplx\_0 X2 np\_1) = k6\_flang\_1 X0 (k7\_flang\_1 X0 X1 X2) X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k3\_catalan2 X0))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k3\_catalan2 X0))) \Rightarrow (\forall X3. (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k3\_catalan2 X0))) \Rightarrow (\forall X4. (m1\_subset\_1 X4 (k1\_zfmisc\_1 (k3\_catalan2 X0))) \Rightarrow (((r1\_tarski X1 X2) \wedge (r1\_tarski X3 X4)) \Rightarrow (r1\_tarski (k6\_flang\_1 X0 X1 X3) (k6\_flang\_1 X0 X2 X4)))))) \quad (3)$$

Assume the following.

$$((v2\_xxreal\_0 np\_1) \wedge (m2\_subset\_1 np\_1 k1\_numbers k5\_numbers)) \wedge ((m1\_subset\_1 np\_1 k5\_numbers) \wedge (m1\_subset\_1 np\_1 k1\_numbers)) \quad (4)$$

Assume the following.

$$\forall X0 : \iota \Rightarrow o. ((X0 \text{ k6\_numbers}) \wedge (\forall X1. (v7\_ordinal1 X1) \Rightarrow ((X0 X1) \Rightarrow (X0 (k1\_nat\_1 X1 \text{ np\_1})))))) \Rightarrow (\forall X1. (v7\_ordinal1 X1) \Rightarrow (X0 X1)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. r1\_tarski X0 X0 \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. ((v7\_ordinal1 X0) \wedge (m1\_subset\_1 X1 \text{ k5\_numbers})) \Rightarrow (k1\_nat\_1 X0 X1 = k2\_xcmplx\_0 X0 X1) \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((m1\_subset\_1 X1 (k1\_zfmisc\_1 (k3\_catalan2 X0))) \wedge (v7\_ordinal1 X2)) \Rightarrow (m1\_subset\_1 (k7\_flang\_1 X0 X1 X2) (k1\_zfmisc\_1 (k3\_catalan2 X0))) \quad (8)$$

**Theorem 1**

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k3\_catalan2 X0))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k3\_catalan2 X0))) \Rightarrow (\forall X3. (v7\_ordinal1 X3) \Rightarrow ((r1\_tarski X1 X2) \Rightarrow (r1\_tarski (k7\_flang\_1 X0 X1 X3) (k7\_flang\_1 X0 X2 X3))))))$$