

# t19\_flgang\_2 (TMPMHhq- cyj6gimAEo2T6AWgQAGaG9iNnYB)

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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  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k1\_flang\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_flang\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_catalan2 : \iota \Rightarrow \iota$  be given. Let  $k3\_tarski : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0 : \iota \Rightarrow o. \forall X1. \forall X2. (X2 \in ReplSep (toset (\lambda X3 : \iota. m1\_subset\_1 X3 X1))) (\lambda X3 : \iota. X0 X3) (\lambda X3 : \iota. X3)) \Rightarrow (X0 X2) \quad (1)$$

Assume the following.

$$\forall X0. k3\_catalan2 X0 = k8\_afinsq\_1 X0 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((m1\_subset\_1 X1 (k1\_zfmisc\_1 (k3\_catalan2 X0))) \wedge (v7\_ordinal1 X2)) \Rightarrow (m1\_subset\_1 (k7\_flang\_1 X0 X1 X2) (k1\_zfmisc\_1 (k3\_catalan2 X0)))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k3\_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (\exists X3. (X2 \in X3) \wedge (X3 \in X0))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k8\_afinsq\_1 X0))) \Rightarrow (\forall X2. (v7\_ordinal1 X2) \Rightarrow (\forall X3. (v7\_ordinal1 X3) \Rightarrow (k1\_flang\_2 X0 X1 X2 X3 = k3\_tarski (ReplSep (toset (\lambda X4 : \iota. m1\_subset\_1 X4 (k1\_zfmisc\_1 (k8\_afinsq\_1 X0)))) (\lambda X4 : \iota. \exists X5. (v7\_ordinal1 X5) \wedge ((r1\_xxreal\_0 X2 X5) \wedge ((r1\_xxreal\_0 X5 X3) \wedge (X4 = k7\_flang\_1 X0 X1 X5)))) (\lambda X4 : \iota. X4)))))) \quad (5)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k8\_afinsq\_1 X0))) \Rightarrow (\forall X3. (v7\_ordinal1 X3) \Rightarrow (\forall X4. \\ & (v7\_ordinal1 X4) \Rightarrow ((X1 \in k1\_flang\_2 X0 X2 X3 X4) \Leftrightarrow (\exists X5. (v7\_ordinal1 \\ & X5) \wedge ((r1\_xxreal\_0 X3 X5) \wedge ((r1\_xxreal\_0 X5 X4) \wedge (X1 \in k7\_flang\_1 \\ & X0 X2 X5))))))) \end{aligned}$$