

t29\_fintopo3 (TM-  
PZR7yMjGJf5GqYM3aVNzJ79FBWNRs15XT)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k4\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_fintopo3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_fintopo3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_orders\_2 X0)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 k5\_numbers) \Rightarrow (k3\_subset\_1 (u1\_struct\_0 X0) (k5\_fintopo3 \\ & X0 (k3\_subset\_1 (u1\_struct\_0 X0) X1) X2) = k3\_fintopo3 X0 X1 X2))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_orders\_2 X0)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X3. \\ & (m1\_subset\_1 X3 k5\_numbers) \Rightarrow (k3\_fintopo3 X0 (k4\_subset\_1 (u1\_struct\_0 \\ & X0) X1 X2) X3 = k4\_subset\_1 (u1\_struct\_0 X0) (k3\_fintopo3 X0 X1 X3) \\ & (k3\_fintopo3 X0 X2 X3)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & X0)) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 X0))) \Rightarrow (m1\_subset\_1 (k4\_subset\_1 \\ & X0 X1 X2) (k1\_zfmisc\_1 X0)) \end{aligned} \quad (3)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_orders\_2 X0)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X3. \\ & (m1\_subset\_1 X3 k5\_numbers) \Rightarrow (k4\_subset\_1 (u1\_struct\_0 X0) (k3\_fintopo3 \\ & X0 X1 X3) (k3\_fintopo3 X0 X2 X3) = k3\_subset\_1 (u1\_struct\_0 X0) (k5\_fintopo3 \\ & X0 (k3\_subset\_1 (u1\_struct\_0 X0) (k4\_subset\_1 (u1\_struct\_0 X0) \\ & X1 X2)) X3)))))) \end{aligned}$$