

t62\_afinsq\_1  
(TMKpvBoqoim3emtaqVAZCom1xobiZmBRg3h)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v5\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $k1\_ordinal4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_afinsq\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k7\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_afinsq\_1 : \iota \Rightarrow \iota$  be given. Let  $k16\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. ((v1\_relat\_1 X1) \wedge ((v5\_ordinal1 X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_finset\_1 X1)))) \Rightarrow (k1\_funct\_1 (k1\_ordinal4 (k5\_afinsq\_1 X0) X1) k6\_numbers = X0) \quad (1)$$

Assume the following.

$$\forall X0. ((v1\_relat\_1 X0) \wedge ((v5\_ordinal1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finset\_1 X0)))) \Rightarrow (\forall X1. ((v1\_relat\_1 X1) \wedge ((v5\_ordinal1 X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_finset\_1 X1)))) \Rightarrow (\forall X2. ((v1\_relat\_1 X2) \wedge ((v5\_ordinal1 X2) \wedge ((v1\_funct\_1 X2) \wedge (v1\_finset\_1 X2)))) \Rightarrow (((k1\_ordinal4 X0 X1 = k1\_ordinal4 X2 X1) \vee (k1\_ordinal4 X1 X0 = k1\_ordinal4 X1 X2)) \Rightarrow (X0 = X2)))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. k7\_funcop\_1 X0 X1 = k2\_funcop\_1 X0 X1 \quad (3)$$

Assume the following.

$$\forall X0. k5\_afinsq\_1 X0 = k3\_afinsq\_1 X0 \quad (4)$$

Assume the following.

$$\forall X0. (v5\_ordinal1 (k3\_afinsq\_1 X0)) \wedge (v1\_finset\_1 (k3\_afinsq\_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0. (v1\_relat\_1 (k3\_afinsq\_1 X0)) \wedge (v1\_funct\_1 (k3\_afinsq\_1 X0)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.k16\_funcop\_1 X0 X1 = k7\_funcop\_1 (k1\_tarski X0) X1 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.k2\_funcop\_1 X0 X1 = k2\_zfmisc\_1 X0 (k1\_tarski X1) \quad (8)$$

Assume the following.

$$\forall X0.k3\_afinsq\_1 X0 = k16\_funcop\_1 k6\_numbers X0 \quad (9)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((v1\_relat\_1 X2)\wedge((v5\_ordinal1 \\ & X2)\wedge((v1\_funct\_1 X2)\wedge(v1\_finset\_1 X2))))\Rightarrow(\forall X3.((v1\_relat\_1 \\ & X3)\wedge((v5\_ordinal1 X3)\wedge((v1\_funct\_1 X3)\wedge(v1\_finset\_1 X3))))\Rightarrow \\ & ((k1\_ordinal4 (k5\_afinsq\_1 X0) X2 = k1\_ordinal4 (k5\_afinsq\_1 X1) \\ & X3)\Rightarrow((X0 = X1)\wedge(X2 = X3))) \end{aligned}$$