t35_scmfsa6a (TMYGeYF7RYWnPkmfEmhqcsHPGtsQYzKzedU)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_compos\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_scmfsa\_2 : \iota$ be given. Let $k5\_card\_1 : \iota \Rightarrow \iota$ be given. Let $k6\_scmfsa6a : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_4 : \iota$ be given. Let $l1\_compos\_1 : \iota \Rightarrow o$ be given. Let $k11\_compos\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finset\_1 : \iota \Rightarrow o$ be given. Let $v1\_afinsq\_1 : \iota \Rightarrow o$ be given. Let $k3\_scmfsa6a : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $l1\_extpro\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_extpro\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np\_\_3 : \iota$ be given. Assume the following.

$$\forall X0.(l1\_compos\_1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_compos\_1\ X0)) \Rightarrow (k5\_card\_1\ (k11\_compos\_1\ X0\ X1) = np\_\_2)) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v4\_relat\_1\ X0\ k5\_numbers) \wedge ((v5\_relat\_1\ X0\ (u1\_compos\_1\ k1\_scmfsa\_2)) \wedge ((\neg v1\_xboole\_0\ X0) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finset\_1\ X0) \wedge (v1\_afinsq\_1\ X0))))))) \Rightarrow (\forall X1.((v1\_relat\_1\ X1) \wedge ((v4\_relat\_1\ X1\ k5\_numbers) \wedge ((v5\_relat\_1\ X1\ (u1\_compos\_1\ k1\_scmfsa\_2)) \wedge ((\neg v1\_xboole\_0\ X1) \wedge ((v1\_funct\_1\ X1) \wedge ((v1\_finset\_1\ X1) \wedge (v1\_afinsq\_1\ X1))))))) \Rightarrow (k5\_card\_1\ (k3\_scmfsa6a\ X0\ X1) = k2\_nat\_1\ (k5\_card\_1\ X0)\ (k5\_card\_1\ X1))) \tag{2}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_2) \wedge (m2\_subset\_1\ np\_\_2\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_2\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_2\ k1\_numbers)) \tag{3}$$

Assume the following.

$$k2\_xcmplx\_0\ np\_\_2\ np\_\_2 = np\_\_4 \tag{4}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k5\_numbers)\wedge(v7\_ordinal1\ X1))\Rightarrow(k2\_nat\_1\ X0\ X1 = k2\_xcmplx\_0\ X0\ X1) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((l1\_compos\_1\ X0)\wedge(m1\_subset\_1\ X1\ (u1\_compos\_1\ X0)))\Rightarrow((\neg v1\_xboole\_0\ (k11\_compos\_1\ X0\ X1))\wedge((v1\_relat\_1\ (k11\_compos\_1\ X0\ X1))\wedge((v4\_relat\_1\ (k11\_compos\_1\ X0\ X1)\ k5\_numbers)\wedge((v5\_relat\_1\ (k11\_compos\_1\ X0\ X1)\ (u1\_compos\_1\ X0))\wedge((v1\_funct\_1\ (k11\_compos\_1\ X0\ X1))\wedge((v1\_finset\_1\ (k11\_compos\_1\ X0\ X1))\wedge(v1\_afinsq\_1\ (k11\_compos\_1\ X0\ X1))))))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(l1\_extpro\_1\ X1\ X0)\Rightarrow((l1\_memstr\_0\ X1\ X0)\wedge(l1\_compos\_1\ X1)) \quad (8)$$

Assume the following.

$$(v1\_extpro\_1\ k1\_scmfsa\_2\ np\_\_3)\wedge(l1\_extpro\_1\ k1\_scmfsa\_2\ np\_\_3) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((l1\_compos\_1\ X0)\wedge(m1\_subset\_1\ X1\ (u1\_compos\_1\ X0)))\Rightarrow((v1\_relat\_1\ (k11\_compos\_1\ X0\ X1))\wedge((v4\_relat\_1\ (k11\_compos\_1\ X0\ X1)\ k5\_numbers)\wedge((v5\_relat\_1\ (k11\_compos\_1\ X0\ X1)\ (u1\_compos\_1\ X0))\wedge((v1\_funct\_1\ (k11\_compos\_1\ X0\ X1))\wedge(v1\_finset\_1\ (k11\_compos\_1\ X0\ X1)))))) \quad (10)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_compos\_1\ k1\_scmfsa\_2))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_compos\_1\ k1\_scmfsa\_2))\Rightarrow(k6\_scmfsa6a\ X0\ X1 = k3\_scmfsa6a\ (k11\_compos\_1\ k1\_scmfsa\_2\ X0)\ (k11\_compos\_1\ k1\_scmfsa\_2\ X1))) \quad (11)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \quad (12)$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_compos\_1\ k1\_scmfsa\_2))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_compos\_1\ k1\_scmfsa\_2))\Rightarrow(k5\_card\_1\ (k6\_scmfsa6a\ X0\ X1) = np\_\_4))$$