

t17\_rpr\_1 (TMaN-  
MXT18NnhxcgTHrLnCNhwauEAnrjQi8t)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_rpr\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k7\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v3\_card\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow ((X0 \neq k6\_numbers) \Rightarrow (k7\_xcmplx\_0 X0 X0 = np\_1)) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_finset\_1 X0) \Rightarrow (\forall X1.(v1\_finset\_1 X1) \Rightarrow ((r1\_tarski X0 X1) \Rightarrow (r1\_xxreal\_0 (k5\_card\_1 X0) (k5\_card\_1 X1)))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X0 (k1\_zfmisc\_1 X1)) \Leftrightarrow (r1\_tarski X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.r1\_tarski k1\_xboole\_0 X0 \quad (4)$$

Assume the following.

$$k1\_card\_1 k1\_xboole\_0 = k1\_xboole\_0 \quad (5)$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow ((r1\_xxreal\_0 X0 X1) \wedge (r1\_xxreal\_0 X1 X0)) \Rightarrow (X0 = X1)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((r1\_tarski\ X0\ X1)\wedge(v1\_finset\_1\ X1))\Rightarrow(v1\_finset\_1\ X0) \quad (7)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(\neg(r1\_xxreal\_0\ k6\_numbers\ X0)\wedge(\neg(r1\_xxreal\_0\ X1\ X0)\wedge(r1\_xxreal\_0\ np\_1\ (k7\_xcmplx\_0\ X0\ X1)))))) \quad (8)$$

Assume the following.

$$r1\_xxreal\_0\ np\_1\ np\_1 \quad (9)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (10)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (11)$$

Assume the following.

$$\forall X0.(v1\_finset\_1\ X0)\Rightarrow(k5\_card\_1\ X0 = k1\_card\_1\ X0) \quad (12)$$

Assume the following.

$$m1\_subset\_1\ np\_1\ k1\_numbers \quad (13)$$

Assume the following.

$$\forall X0.(v1\_finset\_1\ X0)\Rightarrow(m1\_subset\_1\ (k5\_card\_1\ X0)\ k4\_ordinal1) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_finset\_1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)))\Rightarrow(m1\_subset\_1\ (k1\_rpr\_1\ X0\ X1)\ k1\_numbers) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.(v3\_card\_1\ X1\ X0)\Leftrightarrow(k1\_card\_1\ X1 = X0) \quad (16)$$

Assume the following.

$$\forall X0.(v1\_finset\_1\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(k1\_rpr\_1\ X0\ X1 = k7\_xcmplx\_0\ (k5\_card\_1\ X1)\ (k5\_card\_1\ X0))) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0)\wedge(v1\_xxreal\_0\ X1))\Rightarrow((r1\_xxreal\_0\ X0\ X1)\vee(r1\_xxreal\_0\ X1\ X0)) \quad (18)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k4\_ordinal1) \Rightarrow (v7\_ordinal1 X0) \quad (19)$$

Assume the following.

$$\forall X0.(v3\_card\_1 X0 k1\_xboole\_0) \Rightarrow (v1\_xboole\_0 X0) \quad (20)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_xcmplx\_0 X0) \quad (21)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (v1\_xxreal\_0 X0) \quad (22)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (v1\_xreal\_0 X0) \quad (23)$$

Assume the following.

$$\forall X0.(v1\_finset\_1 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (v1\_finset\_1 X1)) \quad (24)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (v1\_xxreal\_0 X0) \quad (25)$$

**Theorem 1**

$$\forall X0.((\neg v1\_xboole\_0 X0) \wedge (v1\_finset\_1 X0)) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (r1\_xxreal\_0 (k1\_rpr\_1 X0 X1) np\_1))$$