t75_card_2 (TMP9FpogcYn2azdjDBhMwrU31jksv7HGGuH)

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Let $v1\_card\_1 : \iota \Rightarrow o$ be given. Let $v1\_finset\_1 : \iota \Rightarrow o$ be given. Let $k1\_card\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3\_ordinal1 : \iota \Rightarrow o$ be given. Let $v4\_ordinal1 : \iota \Rightarrow o$ be given. Let $k11\_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_ordinal1 : \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k10\_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_card\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_card\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $np\_\_2 : \iota$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2\_wellord2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow ((v4\_ordinal1\ X0) \Rightarrow (k11\_ordinal2\ X0\ (k1\_ordinal1\ np\_\_1) = X0)) \tag{1}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow ((k11\_ordinal2\ np\_\_1\ X0 = X0) \wedge (k11\_ordinal2\ X0\ np\_\_1 = X0)) \tag{2}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow (k11\_ordinal2\ (k1\_ordinal1\ X0)\ X1 = k10\_ordinal2\ (k11\_ordinal2\ X0\ X1)\ X1)) \tag{3}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow (k1\_card\_1\ (k11\_ordinal2\ X0\ X1) = k2\_card\_2\ (k1\_card\_1\ X0)\ (k1\_card\_1\ X1))) \tag{4}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_2) \wedge (m2\_subset\_1\ np\_\_2\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_2\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_2\ k1\_numbers)) \tag{5}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_1) \wedge (m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_1\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_1\ k1\_numbers)) \tag{6}$$

Assume the following.

$$k1\_ordinal1\ np\_\_1 = np\_\_2 \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.r2\_wellord2\ X0\ X0 \tag{8}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{9}$$

Assume the following.

$$(\neg v1\_xboole\_0\ k4\_ordinal1)\wedge(v3\_ordinal1\ k4\_ordinal1) \tag{10}$$

Assume the following.

$$\forall X0.v1\_card\_1\ (k1\_card\_1\ X0) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.(v1\_card\_1\ X1)\Rightarrow((X1 = k1\_card\_1\ X0)\Leftrightarrow(r2\_wellord2\ X0\ X1)) \tag{12}$$

Assume the following.

$$\forall X0.k1\_ordinal1\ X0 = k2\_xboole\_0\ X0\ (k1\_tarski\ X0) \tag{13}$$

Assume the following.

$$\forall X0.(v1\_card\_1\ X0)\Rightarrow(\forall X1.(v1\_card\_1\ X1)\Rightarrow(k1\_card\_2\ X0\ X1 = k1\_card\_1\ (k10\_ordinal2\ X0\ X1))) \tag{14}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_card\_1\ X0)\wedge(v1\_card\_1\ X1))\Rightarrow(k2\_card\_2\ X0\ X1 = k2\_card\_2\ X1\ X0) \tag{15}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ X0)\Rightarrow(v3\_ordinal1\ X1)) \tag{16}$$

Assume the following.

$$\forall X0.((\neg v1\_finset\_1\ X0)\wedge(v1\_card\_1\ X0))\Rightarrow((v4\_ordinal1\ X0)\wedge(v1\_card\_1\ X0)) \tag{17}$$

Assume the following.

$$\forall X0.(v1\_card\_1\ X0)\Rightarrow(v3\_ordinal1\ X0) \tag{18}$$

Theorem 1 $\forall X0.(v1\_card\_1\ X0)\Rightarrow((\neg v1\_finset\_1\ X0)\Rightarrow(k1\_card\_2\ X0\ X0 = X0))$.