t57_card_2 (TMGjxvH-PGZyQ7Ve9djgxNkxmTpkfU9HYK32)

October 27, 2020

Let $k5\_card\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $v1\_finset\_1 : \iota \Rightarrow o$ be given. Let $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_card\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ 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 $k5\_numbers : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ 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. Assume the following.

$$\forall X0.(v1\_finset\_1\ X0) \Rightarrow (\forall X1.(v1\_finset\_1\ X1) \Rightarrow ((r1\_xboole\_0\ X0\ X1) \Rightarrow (k5\_card\_1\ (k2\_xboole\_0\ X0\ X1) = k2\_nat\_1\ (k5\_card\_1\ X0)\ (k5\_card\_1\ X1)))) \tag{1}$$

Assume the following.

$$\forall X0.k1\_card\_1\ (k1\_tarski\ X0) = np\_\_1 \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.k2\_tarski\ X0\ X1 = k2\_xboole\_0\ (k1\_tarski\ X0)\ (k1\_tarski\ X1) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \neq X1) \Rightarrow (r1\_xboole\_0\ (k1\_tarski\ X0)\ (k1\_tarski\ X1)) \tag{4}$$

Assume the following.

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

Assume the following.

$$k2\_xcmplx\_0\ np\_\_1\ np\_\_1 = np\_\_2 \tag{6}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{7}$$

Assume the following.

$$\forall X0.(v1\_finset\_1\ X0) \Rightarrow (k5\_card\_1\ X0 = k1\_card\_1\ X0) \tag{8}$$

Assume the following.

$$\begin{gathered}\forall X0.\forall X1.((m1\_subset\_1\ X0\ k5\_numbers) \wedge (v7\_ordinal1 \\ X1)) \Rightarrow (k2\_nat\_1\ X0\ X1 = k2\_xcmplx\_0\ X0\ X1)\end{gathered} \tag{9}$$

Assume the following.

$$\forall X0.v1\_finset\_1\ (k1\_tarski\ X0) \tag{10}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1) \Rightarrow (v7\_ordinal1\ X0) \tag{11}$$

Theorem 1 $\forall X0.\forall X1.(X0 \neq X1) \Rightarrow (k5\_card\_1\ (k2\_tarski\ X0\ X1) = np\_\_2)$.