t5_chain_1 (TMFhB8Gse9cZHUwxh2Ni1nSLmomeTGtL1gR)

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Let $k1\_card\_1 : \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_card\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_finset\_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\neg(k1\_card\_1\ X0 = np\_\_2) \wedge (\forall X1.\forall X2.\neg(X1 \neq X2) \wedge (X0 = k2\_tarski\ X1\ X2)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \neq X1) \Rightarrow (k5\_card\_1\ (k2\_tarski\ X0\ X1) = np\_\_2) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_finset\_1\ X0) \Rightarrow (k5\_card\_1\ X0 = k1\_card\_1\ X0) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.v1\_finset\_1\ (k2\_tarski\ X0\ X1) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2\_tarski\ X0\ X1) \Leftrightarrow (\forall X3.(X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \tag{5}$$

Theorem 1

$$\forall X0.(k1\_card\_1\ X0 = np\_\_2) \Leftrightarrow (\exists X1.\exists X2.(X1 \in X0) \wedge ((X2 \in X0) \wedge ((X1 \neq X2) \wedge (\forall X3.\neg(X3 \in X0) \wedge ((X3 \neq X1) \wedge (X3 \neq X2))))))$$