t5_finseq_4 (TMFg-WEyf8TFygDQdQRYqHzv9y3PeJ7B5w6X)

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Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $r2\_finseq\_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k8\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k1\_card\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $np\_\_1 : \iota$ be given. Let $k10\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1\ X1) \Rightarrow ((X0 \in k10\_xtuple\_0\ X1) \Leftrightarrow (k8\_relat\_1\ X1\ (k1\_tarski\ X0) \neq k1\_xboole\_0)) \tag{1}$$

Assume the following.

$$k1\_card\_1\ k1\_xboole\_0 = k1\_xboole\_0 \tag{2}$$

Assume the following.

$$\neg v1\_xboole\_0\ np\_\_1 \tag{3}$$

Assume the following.

$$v1\_xboole\_0\ k1\_xboole\_0 \tag{4}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ X0) \Rightarrow (\forall X1.(r2\_finseq\_4\ X0\ X1) \Leftrightarrow (k1\_card\_1\ (k10\_relat\_1\ X0\ X1) = np\_\_1)) \tag{5}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ X0) \Rightarrow (\forall X1.k10\_relat\_1\ X0\ X1 = k8\_relat\_1\ X0\ (k1\_tarski\ X1)) \tag{6}$$

Theorem 1

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow (\forall X1.(r2\_finseq\_4\ X0\ X1) \Rightarrow (X1 \in k10\_xtuple\_0\ X0))$$