t23_card_fin (TMTG-GDH8C9ToLwzBdqP7k3ZDvpiqJvgvAqA)

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Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k3\_tarski : \iota \Rightarrow \iota$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k2\_card\_fin : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{1}$$

Assume the following.

$$(k9\_xtuple\_0\ k1\_xboole\_0 = k1\_xboole\_0) \wedge (k10\_xtuple\_0\ k1\_xboole\_0 = k1\_xboole\_0) \tag{2}$$

Assume the following.

$$k3\_tarski\ k1\_xboole\_0 = k1\_xboole\_0 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \wedge ((v1\_relat\_1\ X1) \wedge (v1\_funct\_1\ X1))) \Rightarrow (m1\_subset\_1\ (k2\_card\_fin\ X0\ X1\ X2)\ (k1\_zfmisc\_1\ (k3\_tarski\ (k10\_xtuple\_0\ X0)))) \tag{4}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \Rightarrow (v1\_xboole\_0\ X1)) \tag{5}$$

Theorem 1

$$\forall X0.\forall X1.((v1\_relat\_1\ X1) \wedge (v1\_funct\_1\ X1)) \Rightarrow (\forall X2.((v1\_relat\_1\ X2) \wedge (v1\_funct\_1\ X2)) \Rightarrow (((v1\_xboole\_0\ X1) \vee (v1\_xboole\_0\ (k3\_tarski\ (k10\_xtuple\_0\ X1)))) \Rightarrow (k2\_card\_fin\ X1\ X2\ X0 = k3\_tarski\ (k10\_xtuple\_0\ X1))))$$