t81_card_2 (TMHicqheQYmxXg1hP3NoCwjiDyojagfeqJj)

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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 $r1\_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_card\_1\ X0) \Rightarrow (\forall X1.(v1\_card\_1\ X1) \Rightarrow ((v1\_finset\_1\ X0) \Rightarrow ((v1\_finset\_1\ X1) \vee ((X0 \in X1) \wedge (r1\_ordinal1\ X0\ X1))))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_card\_1\ X0) \Rightarrow (\forall X1.(v1\_card\_1\ X1) \Rightarrow (\neg(\neg v1\_finset\_1\ X0) \wedge (((r1\_ordinal1\ X1\ X0) \vee (X1 \in X0)) \wedge (\neg(k1\_card\_2\ X0\ X1 = X0) \wedge (k1\_card\_2\ X1\ X0 = X0))))) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_card\_1\ X0) \Rightarrow (\forall X1.(v1\_card\_1\ X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (\neg r1\_ordinal1\ X1\ X0))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_card\_1\ X0) \wedge (v1\_card\_1\ X1)) \Rightarrow (k1\_card\_2\ X0\ X1 = k1\_card\_2\ X1\ X0) \tag{4}$$

Theorem 1

$$\forall X0.(v1\_card\_1\ X0) \Rightarrow (\forall X1.(v1\_card\_1\ X1) \Rightarrow ((\neg v1\_finset\_1\ X0) \Rightarrow ((\neg v1\_finset\_1\ (k1\_card\_2\ X0\ X1)) \wedge (\neg v1\_finset\_1\ (k1\_card\_2\ X1\ X0)))))$$