t26_rfinseq (TMaBeii61KB3rhED9MBePiSiZSMeBwXUpzm)

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Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $v2\_funct\_1 : \iota \Rightarrow o$ be given. Let $r2\_classes1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_card\_1 : \iota \Rightarrow \iota$ be given. Let $k10\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X1) \wedge (v1\_funct\_1\ X1)) \Rightarrow (((v2\_funct\_1\ X1) \wedge (X0 \in k10\_xtuple\_0\ X1)) \Rightarrow (k1\_card\_1\ (k10\_relat\_1\ X1\ X0) = np\_\_1)) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow (\forall X1.(\neg X1 \in k10\_xtuple\_0\ X0) \Rightarrow (k10\_relat\_1\ X0\ X1 = k1\_xboole\_0)) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ X0) \Rightarrow (\forall X1.(v1\_relat\_1\ X1) \Rightarrow ((r2\_classes1\ X0\ X1) \Leftrightarrow (\forall X2.k1\_card\_1\ (k10\_relat\_1\ X0\ X2) = k1\_card\_1\ (k10\_relat\_1\ X1\ X2)))) \tag{3}$$

Theorem 1

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow (\forall X1.((v1\_relat\_1\ X1) \wedge (v1\_funct\_1\ X1)) \Rightarrow (((k10\_xtuple\_0\ X0 = k10\_xtuple\_0\ X1) \wedge ((v2\_funct\_1\ X0) \wedge (v2\_funct\_1\ X1))) \Rightarrow (r2\_classes1\ X0\ X1)))$$