t36_card_fil (TMdSxsQ-GLeDLDc3eXz7M92Z3XYe9XdTJnMG)

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Let $v1\_card\_1 : \iota \Rightarrow o$ be given. Let $r1\_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_card\_1 : \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3\_ordinal1 : \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $v2\_funct\_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (r1\_ordinal1\ (k1\_card\_1\ X0)\ X0) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_card\_1\ X0) \Rightarrow (\forall X1.(v1\_card\_1\ X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (\neg r1\_ordinal1\ X1\ X0))) \tag{2}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(v1\_card\_1\ X1) \Rightarrow ((k1\_card\_1\ X0 \in X1) \Rightarrow (X0 \in X1))) \tag{3}$$

Assume the following.

$$\forall X0.(v1\_card\_1\ X0) \Rightarrow (\forall X1.(v1\_card\_1\ X1) \Rightarrow ((X0 \in X1) \Leftrightarrow ((r1\_ordinal1\ X0\ X1) \wedge (X0 \neq X1)))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_ordinal1\ (k1\_card\_1\ X0)\ (k1\_card\_1\ X1)) \Leftrightarrow (\exists X2.((v1\_relat\_1\ X2) \wedge (v1\_funct\_1\ X2)) \wedge ((k9\_xtuple\_0\ X2 = X1) \wedge (r1\_tarski\ X0\ (k10\_xtuple\_0\ X2)))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_ordinal1\ (k1\_card\_1\ X0)\ (k1\_card\_1\ X1)) \Leftrightarrow (\exists X2.((v1\_relat\_1\ X2) \wedge (v1\_funct\_1\ X2)) \wedge ((v2\_funct\_1\ X2) \wedge ((k9\_xtuple\_0\ X2 = X0) \wedge (r1\_tarski\ (k10\_xtuple\_0\ X2)\ X1)))) \tag{6}$$

Assume the following.

$$\forall X0.v1\_card\_1\ (k1\_card\_1\ X0) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1) \Leftrightarrow ((r1\_tarski\ X0\ X1) \wedge (r1\_tarski\ X1\ X0)) \quad (8)$$

Assume the following.

$$\forall X0.(v1\_card\_1\ X0) \Rightarrow (v3\_ordinal1\ X0) \quad (9)$$

Theorem 1

$$\forall X0.\forall X1.(v1\_card\_1\ X1) \Rightarrow (\neg(r1\_ordinal1\ X1\ (k1\_card\_1\ X0)) \wedge (\forall X2.\neg(r1\_tarski\ X2\ X0) \wedge (k1\_card\_1\ X2 = X1)))$$