

t28_card_3 (TMH-
Mjsvmwa3MUqNqSgqfFQLVomTEMxWt82v)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_card_3 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_card_3 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_card_3 X0))) \Rightarrow (k1_card_3 X0 = X0) \quad (1)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_card_3 X1)))) \Rightarrow ((X1 = k1_card_3 X0) \Leftrightarrow ((k9_xtuple_0 X1 = k9_xtuple_0 X0) \wedge (\forall X2.(X2 \in k9_xtuple_0 X0) \Rightarrow (k1_funct_1 X1 X2 = k1_card_1 (k1_funct_1 X0 X2)))))) \quad (2)$$

Theorem 1

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_card_3 X0))) \Rightarrow (\forall X1.(X1 \in k9_xtuple_0 X0) \Rightarrow (k1_card_1 (k1_funct_1 X0 X1) = k1_funct_1 X0 X1))$$