

t92_card_3 (TMT-
fYfW8xKgXFSP8xL2Z5CMbb9mihjy1pGn)

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Let $v1_card_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_card_1 X0) \Rightarrow (\forall X1.(v1_card_1 X1) \Rightarrow ((v1_finset_1 X0) \Rightarrow ((v1_finset_1 X1) \vee ((X0 \in X1) \wedge (r1_ordinal1 X0 X1)))))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_card_1 X0) \Rightarrow (\forall X1.(v1_card_1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow ((r1_ordinal1 X0 X1) \wedge (X0 \neq X1)))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (\neg X1 \in X0) \quad (3)$$

Theorem 1

$$\forall X0.(v1_card_1 X0) \Rightarrow (\forall X1.(v1_card_1 X1) \Rightarrow ((v1_finset_1 X0) \Rightarrow (((\neg r1_ordinal1 X1 X0) \wedge (\neg X1 \in X0)) \vee (v1_finset_1 X1))))))$$