

t9_card_5 (TMHH-
ncu2zBe3481RMUqK2kLqLxS9McVPxJH)

October 27, 2020

Let $v3_ordinal1 : \iota \Rightarrow o$ be given. 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 $r2_ordinal2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\exists X1.(v3_ordinal1 X1) \wedge ((r1_ordinal1 X1 (k1_card_1 X0)) \wedge (r2_ordinal2 X0 X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (r1_ordinal1 (k1_card_1 X0) X0) \quad (2)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (\forall X2.(v3_ordinal1 X2) \Rightarrow (((r2_ordinal2 X0 X1) \wedge (r2_ordinal2 X1 X2)) \Rightarrow (r2_ordinal2 X0 X2)))) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1_tarski X0 X1) \wedge (r1_tarski X1 X2)) \Rightarrow (r1_tarski X0 X2) \quad (4)$$

Assume the following.

$$\forall X0 : \iota \Rightarrow o.(\exists X1.(v3_ordinal1 X1) \wedge (X0 X1)) \Rightarrow (\exists X1.(v3_ordinal1 X1) \wedge ((X0 X1) \wedge (\forall X2.(v3_ordinal1 X2) \Rightarrow ((X0 X2) \Rightarrow (r1_ordinal1 X1 X2)))) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1 X0) \wedge (v3_ordinal1 X1)) \Rightarrow ((r1_ordinal1 X0 X1) \Leftrightarrow (r1_tarski X0 X1)) \quad (6)$$

Assume the following.

$$\forall X0.v1_card_1 (k1_card_1 X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1) \Leftrightarrow ((r1_tarSKI X0 X1) \wedge (r1_tarSKI X1 X0)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1 X0) \wedge (v3_ordinal1 X1)) \Rightarrow (r1_ordinal1 X0 X1) \vee (r1_ordinal1 X1 X0) \quad (9)$$

Assume the following.

$$\forall X0.(v1_card_1 X0) \Rightarrow (v3_ordinal1 X0) \quad (10)$$

Theorem 1

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\exists X1.(v1_card_1 X1) \wedge ((r1_ordinal1 X1 (k1_card_1 X0)) \wedge (r2_ordinal2 X0 X1) \wedge (\forall X2.(v3_ordinal1 X2) \Rightarrow ((r2_ordinal2 X0 X2) \Rightarrow (r1_ordinal1 X1 X2))))))$$