

t6_card_1

(TMFW2W2ZNSkjDxMxqd6sz3Uz8sUrY7STHEj)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v2_wellord1 : \iota \Rightarrow o$ be given. Let $r2_wellord2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relat_1 : \iota \Rightarrow \iota$ be given. Let $k2_wellord2 : \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_wellord2 : \iota \Rightarrow \iota$ be given. Let $r4_wellord1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $r3_wellord1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (v3_ordinal1 (k2_wellord2 X0)) \quad (1)$$

Assume the following.

$$\forall X0.v1_relat_1 (k1_wellord2 X0) \quad (2)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(v1_relat_1 X1) \Rightarrow ((r4_wellord1 X0 X1) \Leftrightarrow (\exists X2.((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \wedge (r3_wellord1 X0 X1 X2)))) \quad (3)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(v1_relat_1 X1) \Rightarrow (\forall X2.((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow ((r3_wellord1 X0 X1 X2) \Leftrightarrow ((k9_xtuple_0 X2 = k1_relat_1 X0) \wedge ((k10_xtuple_0 X2 = k1_relat_1 X1) \wedge ((v2_funct_1 X2) \wedge (\forall X3.\forall X4.(k4_tarski X3 X4 \in X0) \Leftrightarrow ((X3 \in k1_relat_1 X0) \wedge ((X4 \in k1_relat_1 X0) \wedge (k4_tarski (k1_funct_1 X2 X3) (k1_funct_1 X2 X4) \in X1)))))))))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(r2_wellord2 X0 X1) \Leftrightarrow (\exists X2.((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \wedge ((v2_funct_1 X2) \wedge ((k9_xtuple_0 X2 = X0) \wedge (k10_xtuple_0 X2 = X1)))) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_relat_1 X0) \Rightarrow ((v2_wellord1 X0) \Rightarrow (\forall X1.(v3_ordinal1 \\ X1) \Rightarrow ((X1 = k2_wellord2 X0) \Leftrightarrow (r4_wellord1 X0 (k1_wellord2 X1)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(v1_relat_1 X1) \Rightarrow ((X1 = k1_wellord2 X0) \Leftrightarrow \\ ((k1_relat_1 X1 = X0) \wedge (\forall X2.\forall X3.((X2 \in X0) \wedge (X3 \in X0)) \Rightarrow \\ ((k4_tarski X2 X3 \in X1) \Leftrightarrow (r1_tarski X2 X3)))))) \end{aligned} \quad (7)$$

Theorem 1

$$\forall X0.(v1_relat_1 X0) \Rightarrow ((v2_wellord1 X0) \Rightarrow (r2_wellord2 (\\ k1_relat_1 X0) (k2_wellord2 X0)))$$