

t32_ordinal6
(TML88xYe7gQNFq9iP8eFrCStw7tybYB4SRG)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v5_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_ordinal2 : \iota \Rightarrow o$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k3_ordinal6 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_abian : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \neg(X0 \in X1) \wedge (r1_tarski X1 X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge ((v5_ordinal1 X1) \wedge (v1_ordinal2 X1)))) \Rightarrow ((X0 \in k9_xtuple_0 (k3_ordinal6 X1)) \Rightarrow (r1_tarski X0 (k1_funct_1 (k3_ordinal6 X1) X0))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge ((v5_ordinal1 X1) \wedge (v1_ordinal2 X1)))) \Rightarrow ((X0 \in k9_xtuple_0 (k3_ordinal6 X1)) \Rightarrow (r1_abian (k1_funct_1 (k3_ordinal6 X1) X0) X1)) \quad (3)$$

Assume the following.

$$\forall X0. (v3_ordinal1 X0) \Rightarrow (\forall X1. (v3_ordinal1 X1) \Rightarrow ((r1_ordinal1 X0 X1) \vee (X1 \in X0))) \quad (4)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v5_ordinal1 X0))) \Rightarrow (v3_ordinal1 (k9_xtuple_0 X0)) \quad (5)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v5_ordinal1 X0) \wedge (v1_ordinal2 X0)))) \Rightarrow ((v1_relat_1 (k3_ordinal6 X0)) \wedge ((v1_funct_1 (k3_ordinal6 X0)) \wedge ((v5_ordinal1 (k3_ordinal6 X0)) \wedge (v1_ordinal2 (k3_ordinal6 X0))))) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1)\wedge(v1_funct_1 X1))\Rightarrow((r1_abian X0 X1)\Leftrightarrow((X0 \in k9_xtuple_0 X1)\wedge(X0 = k1_funct_1 X1 X0))) \quad (7)$$

Theorem 1

$$\forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge((v5_ordinal1 X0)\wedge(v1_ordinal2 X0))))\Rightarrow(r1_ordinal1 (k9_xtuple_0 (k3_ordinal6 X0)) (k9_xtuple_0 X0))$$