

t46_ordinal6
(TMEyCyhHvwstm8Q6g4e1eg8fYu3t3CFFv kf)

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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 $v3_ordinal6 : \iota \Rightarrow o$ be given. Let $v1_ordinal6 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_ordinal2 : \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $r1_abian : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_ordinal6 X0) \Leftrightarrow (\forall X1.(X1 \in X0) \Rightarrow (v3_ordinal1 X1)) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v3_ordinal6 X0))) \Rightarrow ((v5_ordinal1 (k1_funct_1 X0 X1)) \wedge (v1_ordinal2 (k1_funct_1 X0 X1))) \quad (2)$$

Assume the following.

$$\forall X0.(v5_ordinal1 X0) \Leftrightarrow (v3_ordinal1 (k9_xtuple_0 X0)) \quad (3)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow (v3_ordinal1 X1)) \quad (4)$$

Theorem 1

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v5_ordinal1 X0) \wedge (v3_ordinal6 X0)))) \Rightarrow (v1_ordinal6 (ReplSep (toset (\lambda X1 : \iota.m1_subset_1 X1 (k9_xtuple_0 (k1_funct_1 X0 k6_numbers)))) (\lambda X1 : \iota.(X1 \in k9_xtuple_0 (k1_funct_1 X0 k6_numbers))) \wedge (\forall X2. ((v1_relat_1 X2) \wedge ((v1_funct_1 X2) \wedge ((v5_ordinal1 X2) \wedge (v1_ordinal2 X2)))) \Rightarrow ((X2 \in k10_xtuple_0 X0) \Rightarrow (r1_abian X1 X2)))) (\lambda X1 : \iota.X1)))$$