

t48\_ordinal2 (TM-  
FJcs7xdMxuhHoQapAK6XokFF5oDwp2jUt)

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Let  $v5\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_ordinal2 : \iota \Rightarrow o$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (v3\_ordinal1 X1) \Rightarrow ((X0 \in X1) \Rightarrow (v3\_ordinal1 X0)) \quad (1)$$

Assume the following.

$$\forall X0. ((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow ((v1\_ordinal2 X0) \Leftrightarrow (\exists X1. (v3\_ordinal1 X1) \wedge (r1\_tarski (k10\_xtuple\_0 X0) X1))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (3)$$

**Theorem 1**

$$\forall X0. ((v5\_ordinal1 X0) \wedge ((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_ordinal2 X0)))) \Rightarrow (\forall X1. (X1 \in k10\_xtuple\_0 X0) \Rightarrow (v3\_ordinal1 X1))$$