

t88\_orders\_1 (TMTZrZCWeg-  
PEA1x8s9yPZHFk7b9LmTnhKrk)

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Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k2\_wellord2 : \iota \Rightarrow \iota$  be given. Let  $k1\_wellord2 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_wellord1 : \iota \Rightarrow o$  be given. Let  $v1\_relat_1 : \iota \Rightarrow o$  be given. Let  $r4\_wellord1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v3\_ordinal1 X0) \Rightarrow (\forall X1.(r1\_tarski X1 X0) \Rightarrow (v2\_wellord1 (k1\_wellord2 X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_relat_1 X0) \Rightarrow (\neg(v2\_wellord1 X0) \wedge (\forall X1.(v3\_ordinal1 X1) \Rightarrow (\neg r4\_wellord1 X0 (k1\_wellord2 X1)))) \quad (2)$$

Assume the following.

$$\forall X0.(v3\_ordinal1 X0) \Rightarrow (\forall X1.(v3\_ordinal1 X1) \Rightarrow ((r4\_wellord1 (k1\_wellord2 X0) (k1\_wellord2 X1)) \Rightarrow (X0 = X1))) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski X0 X0 \quad (4)$$

Assume the following.

$$\forall X0.v1\_relat_1 (k1\_wellord2 X0) \quad (5)$$

Assume the following.

$$\forall X0.(v1\_relat_1 X0) \Rightarrow ((v2\_wellord1 X0) \Rightarrow (\forall X1.(v3\_ordinal1 X1) \Rightarrow ((X1 = k2\_wellord2 X0) \Leftrightarrow (r4\_wellord1 X0 (k1\_wellord2 X1)))))) \quad (6)$$

**Theorem 1**  $\forall X0.(v3\_ordinal1 X0) \Rightarrow (k2\_wellord2 (k1\_wellord2 X0) = X0)$ .