

t11\_wellord2  
(TMLZFevjsqenK17PPRyEGAh2U8cdQJYQija)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r4\_wellord1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_wellord2 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(v1\_relat\_1 X0) \Rightarrow (\forall X1.(v1\_relat\_1 X1) \Rightarrow (\forall X2.(v1\_relat\_1 X2) \Rightarrow (((r4\_wellord1 X0 X1) \wedge (r4\_wellord1 X1 X2)) \Rightarrow (r4\_wellord1 X0 X2)))) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_relat\_1 X0) \Rightarrow (\forall X1.(v1\_relat\_1 X1) \Rightarrow ((r4\_wellord1 X0 X1) \Rightarrow (r4\_wellord1 X1 X0))) \quad (2)$$

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.

$$\forall X0.v1\_relat\_1 (k1\_wellord2 X0) \quad (4)$$

**Theorem 1**

$$\forall X0.(v1\_relat\_1 X0) \Rightarrow (\forall X1.(v3\_ordinal1 X1) \Rightarrow (\forall X2.(v3\_ordinal1 X2) \Rightarrow (((r4\_wellord1 X0 (k1\_wellord2 X1)) \wedge (r4\_wellord1 X0 (k1\_wellord2 X2))) \Rightarrow (X1 = X2))))$$