

# l43\_card\_1

(TMY9jzQ9cnmt4ddhjxibtZD6KtA5HDzhaL4j)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r2\_wellord2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k1\_ordinal1 : \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\neg(X0 \neq k1\_xboole\_0) \wedge (\forall X1.(v7\_ordinal1 X1) \Rightarrow (X0 \neq k1\_ordinal1 X1))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(r2\_wellord2 (k1\_ordinal1 X0) (k1\_ordinal1 X1)) \Rightarrow (r2\_wellord2 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0.(r2\_wellord2 X0 k1\_xboole\_0) \Rightarrow (X0 = k1\_xboole\_0) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(r2\_wellord2 X0 X1) \Rightarrow (r2\_wellord2 X1 X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1 : \iota \Rightarrow o.((X1 k1\_xboole\_0) \wedge (\forall X2.(v7\_ordinal1 X2) \Rightarrow ((X1 X2) \Rightarrow (X1 (k1\_ordinal1 X2)))))) \Rightarrow (X1 X0) \quad (5)$$

Assume the following.

$$\forall X0.k1\_ordinal1 X0 = k2\_xboole\_0 X0 (k1\_tarski X0) \quad (6)$$

**Theorem 1**

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow ((r2\_wellord2 X0 X1) \Rightarrow (X0 = X1)))$$