

t20_ordinal6
(TMU8gbyAHeJxhJQPoeJMzNj6nBZwuTUTb6Z)

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Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_ordinal6 : \iota \Rightarrow \iota$ be given. Let $k2_ordinal1 : \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_wellord2 : \iota \Rightarrow \iota$ be given. Let $k1_wellord2 : \iota \Rightarrow \iota$ be given. Let $k1_ordinal6 : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v1_ordinal6 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(r1_tarski X1 X0) \Rightarrow (k1_card_1 X1 = k1_card_1 (k2_wellord2 (k1_wellord2 X1)))) \quad (1)$$

Assume the following.

$$\forall X0.(k9_xtuple_0 (k2_ordinal6 X0) = k1_ordinal6 X0) \wedge (k10_xtuple_0 (k2_ordinal6 X0) = k2_ordinal1 X0) \quad (2)$$

Assume the following.

$$\forall X0.v1_ordinal6 (k2_ordinal1 X0) \quad (3)$$

Assume the following.

$$\forall X0.k1_ordinal6 X0 = k2_wellord2 (k1_wellord2 (k2_ordinal1 X0)) \quad (4)$$

Assume the following.

$$\forall X0.(v1_ordinal6 X0) \Leftrightarrow (\exists X1.(v3_ordinal1 X1) \wedge (r1_tarski X0 X1)) \quad (5)$$

Theorem 1

$$\forall X0.k1_card_1 (k9_xtuple_0 (k2_ordinal6 X0)) = k1_card_1 (k2_ordinal1 X0)$$