

# t1\_classes1 (TMFCHUHn- RztXxn5DziAbtDtZKBB7KytUSzo)

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Let  $v2\_classes1 : \iota \Rightarrow o$  be given. Let  $v1\_classes1 : \iota \Rightarrow o$  be given. Let  $k9\_setfam\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $r2\_wellord2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_card\_1 : \iota \Rightarrow o$  be given. Let  $r1\_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r2\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (r2\_wellord2 X0 X1) \Leftrightarrow (k1\_card\_1 X0 = k1\_card\_1 X1) \quad (1)$$

Assume the following.

$$\forall X0. (v1\_card\_1 X0) \Rightarrow (\forall X1. (v1\_card\_1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow ((r1\_ordinal1 X0 X1) \wedge (X0 \neq X1)))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Rightarrow (r1\_ordinal1 (k1\_card\_1 X0) (k1\_card\_1 X1)) \quad (3)$$

Assume the following.

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

Assume the following.

$$\forall X0. v1\_card\_1 (k1\_card\_1 X0) \quad (5)$$

Assume the following.

$$\forall X0. (v2\_classes1 X0) \Leftrightarrow ((v1\_classes1 X0) \wedge ((\forall X1. (X1 \in X0) \Rightarrow (k9\_setfam\_1 X1 \in X0)) \wedge (\forall X1. \neg (r1\_tarski X1 X0) \wedge (\neg r2\_tarski X1 X0) \wedge (\neg X1 \in X0)))) \quad (6)$$

**Theorem 1**

$$\forall X0. (v2\_classes1 X0) \Leftrightarrow ((v1\_classes1 X0) \wedge ((\forall X1. (X1 \in X0) \Rightarrow (k9\_setfam\_1 X1 \in X0)) \wedge (\forall X1. ((r1\_tarski X1 X0) \wedge (k1\_card\_1 X1 \in k1\_card\_1 X0)) \Rightarrow (X1 \in X0))))$$