

t44\_classes2  
(TMRc9evnGoyWzqyi8WDtss5ZNgvcoixDGsv)

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Let  $v1\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r1\_classes1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_classes1 : \iota \Rightarrow \iota$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_classes1 : \iota \Rightarrow \iota$  be given. Let  $v2\_classes1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. ((v1\_ordinal1 X0) \wedge (X0 \in k1\_classes1 X1)) \Rightarrow (X0 \in k4\_classes1 (k1\_card\_1 (k1\_classes1 X1))) \quad (1)$$

Assume the following.

$$\forall X0. v2\_classes1 (k4\_classes1 (k1\_card\_1 (k1\_classes1 X0))) \quad (2)$$

Assume the following.

$$\forall X0. X0 \in k1\_classes1 X0 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_classes1 X0 X1) \Leftrightarrow ((X0 \in X1) \wedge (v2\_classes1 X1)) \quad (4)$$

**Theorem 1**

$$\forall X0. (v1\_ordinal1 X0) \Rightarrow (r1\_classes1 X0 (k4\_classes1 (k1\_card\_1 (k1\_classes1 X0))))$$