

t41\_card\_2  
(TMTKTdbvR7MzMxba4JxvfHiF1BpzEtotZEF)

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Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $k5\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k2\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (r1\_xboole\_0 X0 X1) \Leftrightarrow (k4\_xboole\_0 X0 X1 = X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (k4\_xboole\_0 X0 (k1\_tarski X1) = X0) \Leftrightarrow (\neg X1 \in X0) \quad (2)$$

Assume the following.

$$\forall X0. (v1\_finset\_1 X0) \Rightarrow (\forall X1. (v1\_finset\_1 X1) \Rightarrow ((r1\_xboole\_0 X0 X1) \Rightarrow (k5\_card\_1 (k2\_xboole\_0 X0 X1) = k2\_nat\_1 (k5\_card\_1 X0) (k5\_card\_1 X1)))) \quad (3)$$

Assume the following.

$$\forall X0. k1\_card\_1 (k1\_tarski X0) = np\_1 \quad (4)$$

Assume the following.

$$\forall X0. (v1\_finset\_1 X0) \Rightarrow (k5\_card\_1 X0 = k1\_card\_1 X0) \quad (5)$$

Assume the following.

$$\forall X0. v1\_finset\_1 (k1\_tarski X0) \quad (6)$$

**Theorem 1**

$$\forall X0. \forall X1. (v1\_finset\_1 X1) \Rightarrow ((\neg X0 \in X1) \Rightarrow (k5\_card\_1 (k2\_xboole\_0 X1 (k1\_tarski X0)) = k2\_nat\_1 (k5\_card\_1 X1) np\_1))$$