

l52\_graph\_2  
(TMQo2L8DV6bqSAHtd2q4qVVDpQLJTuyQd1)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k1\_tarSKI : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. k1\_card\_1 (k1\_tarSKI X0) = np\_1 \quad (1)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Leftrightarrow (\forall X1. \neg X1 \in X0) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1\_tarSKI X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (3)$$

**Theorem 1**

$$\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow ((\forall X1. \forall X2. ((X1 \in X0) \wedge (X2 \in X0)) \Rightarrow (X1 = X2)) \Rightarrow (k1\_card\_1 X0 = np\_1))$$