t18_card_3 (TMQKkDBdhLQzbWFQBeSd-MZwnmieF7N9RQYN)

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Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_card\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Assume the following.

$$\forall X0.\forall X1.k4\_xboole\_0\ X0\ (k2\_xboole\_0\ X0\ X1) = k1\_xboole\_0 \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k4\_xboole\_0\ (k4\_xboole\_0\ X0\ X1)\ X2 = k4\_xboole\_0\ X0\ (k2\_xboole\_0\ X1\ X2) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ (k4\_xboole\_0\ X1\ X0) = k2\_xboole\_0\ X0\ X1 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k5\_card\_3\ X2\ (k2\_xboole\_0\ X0\ X1) = k2\_xboole\_0\ (k5\_card\_3\ X2\ X0)\ (k5\_card\_3\ X2\ X1) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.k6\_subset\_1\ X0\ X1 = k4\_xboole\_0\ X0\ X1 \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(k4\_xboole\_0\ X0\ X1 = k1\_xboole\_0) \Leftrightarrow (r1\_tarski\ X0\ X1) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ X1 = k2\_xboole\_0\ X1\ X0 \tag{7}$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.r1\_tarski\ (k6\_subset\_1\ (k5\_card\_3\ X1\ X0)\ (k5\_card\_3\ X1\ X2))\ (k5\_card\_3\ X1\ (k6\_subset\_1\ X0\ X2))$$