l1_prob_4 (TMdAnuzjXdxNDExxQ76srCYmu5eZSa5t31y)

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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 $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.(r1\_tarski\ X2\ X1) \Rightarrow (k4\_xboole\_0\ X0\ X2 = k2\_xboole\_0\ (k4\_xboole\_0\ X0\ X1)\ (k3\_xboole\_0\ X0\ (k4\_xboole\_0\ X1\ X2))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0)) \Rightarrow (k9\_subset\_1\ X0\ X1\ X2 = k3\_xboole\_0\ X1\ X2) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.k6\_subset\_1\ X0\ X1 = k4\_xboole\_0\ X0\ X1 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.m1\_subset\_1\ (k6\_subset\_1\ X0\ X1)\ (k1\_zfmisc\_1\ X0) \tag{4}$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.(r1\_tarski\ X2\ X1) \Rightarrow (k6\_subset\_1\ X0\ X2 = k2\_xboole\_0\ (k6\_subset\_1\ X0\ X1)\ (k9\_subset\_1\ X1\ X0\ (k6\_subset\_1\ X1\ X2)))$$