t19_subset_1 (TML19pKcCcgNASvvFXADdXt1jx5dNAdCfR8)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_subset\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_subset\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_xboole\_0 : \iota$ be given. Assume the following.

$$\forall X0.k2\_subset\_1\ X0 = k3\_subset\_1\ X0\ (k1\_subset\_1\ X0) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \Rightarrow ((r1\_tarski\ X1\ (k3\_subset\_1\ X0\ X1)) \Leftrightarrow (X1 = k1\_subset\_1\ X0)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \Rightarrow (k3\_subset\_1\ X0\ (k3\_subset\_1\ X0\ X1) = X1) \tag{3}$$

Assume the following.

$$\forall X0.\neg v1\_xboole\_0\ (k1\_zfmisc\_1\ X0) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \Rightarrow (m1\_subset\_1\ (k3\_subset\_1\ X0\ X1)\ (k1\_zfmisc\_1\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.k2\_subset\_1\ X0 = X0 \tag{6}$$

Assume the following.

$$\forall X0.k1\_subset\_1\ X0 = k1\_xboole\_0 \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1\_zfmisc\_1\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (r1\_tarski\ X2\ X0)) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0)\Rightarrow((m1\_subset\_1\ X1\ X0)\Leftrightarrow (X1 \in X0)))\wedge((v1\_xboole\_0\ X0)\Rightarrow((m1\_subset\_1\ X1\ X0)\Leftrightarrow(v1\_xboole\_0\ X1))) \tag{9}$$

Theorem 1

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow((r1\_tarski\ (k3\_subset\_1\ X0\ X1)\ X1)\Leftrightarrow(X1 = k2\_subset\_1\ X0))$$