t57_yellow_9 (TMVvgsDtWtbFU3ag2j8eHGEar2KnYf3Rcf2)

October 27, 2020

Let $l1\_pre\_topc : \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $m3\_yellow\_9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2\_yellow\_9 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_tops\_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_pre\_topc : \iota \Rightarrow \iota$ be given. Let $v2\_pre\_topc : \iota \Rightarrow o$ be given. Let $v2\_cantor\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ X0\ (k2\_xboole\_0\ X0\ X1) \tag{1}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))) \Rightarrow ((v1\_tops\_2\ X1\ X0) \Leftrightarrow (r1\_tarski\ X1\ (u1\_pre\_topc\ X0)))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1\_tarski\ X0\ X1) \wedge (r1\_tarski\ X1\ X2)) \Rightarrow (r1\_tarski\ X0\ X2) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ X0 = X0 \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((l1\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X1)) \Rightarrow (\forall X2.(m3\_yellow\_9\ X2\ X0\ X1) \Rightarrow ((v2\_pre\_topc\ X2) \wedge (l1\_pre\_topc\ X2))) \tag{5}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (\forall X1.(l1\_pre\_topc\ X1) \Rightarrow (\forall X2.((v2\_pre\_topc\ X2) \wedge (l1\_pre\_topc\ X2)) \Rightarrow ((m3\_yellow\_9\ X2\ X0\ X1) \Leftrightarrow ((u1\_struct\_0\ X2 = k2\_xboole\_0\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1)) \wedge ((v1\_tops\_2\ (k2\_xboole\_0\ (u1\_pre\_topc\ X0)\ (u1\_pre\_topc\ X1))\ X2) \wedge ((v2\_cantor\_1\ (k2\_xboole\_0\ (u1\_pre\_topc\ X0)\ (u1\_pre\_topc\ X1))\ X2) \wedge (m1\_subset\_1\ (k2\_xboole\_0\ (u1\_pre\_topc\ X0)\ (u1\_pre\_topc\ X1))\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X2)))))))))) \tag{6}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(\forall X1.((v2\_pre\_topc\ X1)\wedge(l1\_pre\_topc\ X1))\Rightarrow((m2\_yellow\_9\ X1\ X0)\Leftrightarrow((u1\_struct\_0\ X0 = u1\_struct\_0\ X1)\wedge(r1\_tarski\ (u1\_pre\_topc\ X0)\ (u1\_pre\_topc\ X1))))) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ X1 = k2\_xboole\_0\ X1\ X0 \tag{8}$$

Theorem 1

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(\forall X1.(l1\_pre\_topc\ X1)\Rightarrow((u1\_struct\_0\ X0 = u1\_struct\_0\ X1)\Rightarrow(\forall X2.(m3\_yellow\_9\ X2\ X0\ X1)\Rightarrow((m2\_yellow\_9\ X2\ X0)\wedge(m2\_yellow\_9\ X2\ X1)))))$$