t41_yellow_6 (TMVMha7hF7twjrHAvjxFjf7h6SwFZsMyTSJ)

October 27, 2020

Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Let $v8\_yellow\_6 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m4\_yellow\_6 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k13\_yellow\_6 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4\_orders\_2 : \iota \Rightarrow o$ be given. Let $v7\_waybel\_0 : \iota \Rightarrow o$ be given. Let $l1\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_pre\_topc : \iota \Rightarrow o$ be given. Let $l1\_pre\_topc : \iota \Rightarrow o$ be given. Let $u1\_pre\_topc : \iota \Rightarrow \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X2))) \Rightarrow (m1\_subset\_1\ X0\ X2) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2\_struct\_0\ X0) \wedge (l1\_struct\_0\ X0)) \wedge (m4\_yellow\_6\ X1\ X0)) \Rightarrow ((\neg v2\_struct\_0\ (k13\_yellow\_6\ X0\ X1)) \wedge (v1\_pre\_topc\ (k13\_yellow\_6\ X0\ X1))) \tag{2}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (m1\_subset\_1\ (u1\_pre\_topc\ X0)\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2\_struct\_0\ X0) \wedge (l1\_struct\_0\ X0)) \wedge (m4\_yellow\_6\ X1\ X0)) \Rightarrow ((v1\_pre\_topc\ (k13\_yellow\_6\ X0\ X1)) \wedge (l1\_pre\_topc\ (k13\_yellow\_6\ X0\ X1))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.k4\_tarski\ X0\ X1 = k2\_tarski\ (k2\_tarski\ X0\ X1)\ (k1\_tarski\ X0) \tag{5}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow((v3\_pre\_topc\ X1\ X0)\Leftrightarrow(X1\in u1\_pre\_topc\ X0))) \tag{6}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_struct\_0\ X0))\Rightarrow(\forall X1.(m4\_yellow\_6\ X1\ X0)\Rightarrow(\forall X2.((v1\_pre\_topc\ X2)\wedge(l1\_pre\_topc\ X2))\Rightarrow((X2 = k13\_yellow\_6\ X0\ X1)\Leftrightarrow((u1\_struct\_0\ X2 = u1\_struct\_0\ X0)\wedge(u1\_pre\_topc\ X2 = ReplSep\ (toset\ (\lambda X3:\iota.m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))\ (\lambda X3:\iota.\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X0))\Rightarrow((X4\in X3)\Rightarrow(\forall X5.((\neg v2\_struct\_0\ X5)\wedge((v4\_orders\_2\ X5)\wedge((v7\_waybel\_0\ X5)\wedge(l1\_waybel\_0\ X5\ X0))))\Rightarrow((k4\_tarski\ X5\ X4\in X1)\Rightarrow(r1\_waybel\_0\ X0\ X5\ X3)))))\ (\lambda X3:\iota.X3)))))) \tag{7}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_struct\_0\ X0))\Rightarrow(\forall X1.((v8\_yellow\_6\ X1\ X0)\wedge(m4\_yellow\_6\ X1\ X0))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k13\_yellow\_6\ X0\ X1))))\Rightarrow((v3\_pre\_topc\ X2\ (k13\_yellow\_6\ X0\ X1))\Leftrightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0))\Rightarrow((X3\in X2)\Rightarrow(\forall X4.((\neg v2\_struct\_0\ X4)\wedge((v4\_orders\_2\ X4)\wedge((v7\_waybel\_0\ X4)\wedge(l1\_waybel\_0\ X4\ X0))))\Rightarrow((k4\_tarski\ X4\ X3\in X1)\Rightarrow(r1\_waybel\_0\ X0\ X4\ X2))))))))$$