t66_topgen_4 (TMMyx81zrg4D1afsvVziY2BguBsRfnHqktH)

October 27, 2020

Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v2\_pre\_topc : \iota \Rightarrow o$ be given. Let $l1\_pre\_topc : \iota \Rightarrow o$ be given. Let $k5\_topgen\_4 : \iota \Rightarrow \iota$ be given. Let $k9\_prob\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_openlatt : \iota \Rightarrow \iota$ be given. Let $v1\_tops\_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_topgen\_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_prob\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4\_prob\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3\_topgen\_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0))) \Rightarrow (\forall X1.((v1\_tops\_2\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))) \Rightarrow (r1\_tarski\ X1\ (k5\_topgen\_4\ X0))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))) \Rightarrow (((v1\_topgen\_4\ X1\ X0) \wedge (r1\_tarski\ X1\ X2)) \Rightarrow (v1\_topgen\_4\ X2\ X0)))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))) \Rightarrow (((\neg v1\_xboole\_0\ X1) \wedge ((v1\_prob\_1\ X1\ X0) \wedge ((v4\_prob\_1\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))))) \Leftrightarrow ((v1\_prob\_1\ X1\ X0) \wedge (v3\_topgen\_4\ X1\ X0))) \tag{3}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0))) \Rightarrow ((v1\_tops\_2\ (k1\_openlatt\ X0)\ X0) \wedge (v1\_topgen\_4\ (k1\_openlatt\ X0)\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_struct\_0\ X0))\Rightarrow(\neg v1\_xboole\_0\ (u1\_struct\_0\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(l1\_struct\_0\ X0) \tag{6}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow((v1\_prob\_1\ (k5\_topgen\_4\ X0)\ (u1\_struct\_0\ X0))\wedge((v1\_topgen\_4\ (k5\_topgen\_4\ X0)\ X0)\wedge((v3\_topgen\_4\ (k5\_topgen\_4\ X0)\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ (k5\_topgen\_4\ X0)\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))))) \tag{7}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(m1\_subset\_1\ (k1\_openlatt\ X0)\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))) \tag{8}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))\Rightarrow(\forall X2.((\neg v1\_xboole\_0\ X2)\wedge((v1\_prob\_1\ X2\ X0)\wedge((v4\_prob\_1\ X2\ X0)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\Rightarrow((X2 = k9\_prob\_1\ X0\ X1)\Leftrightarrow((r1\_tarski\ X1\ X2)\wedge(\forall X3.((r1\_tarski\ X1\ X3)\wedge((\neg v1\_xboole\_0\ X3)\wedge((v1\_prob\_1\ X3\ X0)\wedge((v4\_prob\_1\ X3\ X0)\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))))))\Rightarrow(r1\_tarski\ X2\ X3)))))) \tag{9}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow(\forall X1.((v1\_prob\_1\ X1\ (u1\_struct\_0\ X0))\wedge((v1\_topgen\_4\ X1\ X0)\wedge((v3\_topgen\_4\ X1\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))))))\Rightarrow((X1 = k5\_topgen\_4\ X0)\Leftrightarrow(\forall X2.((v1\_prob\_1\ X2\ (u1\_struct\_0\ X0))\wedge((v1\_topgen\_4\ X2\ X0)\wedge((v3\_topgen\_4\ X2\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))))))\Rightarrow(r1\_tarski\ X1\ X2)))) \tag{10}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow(k5\_topgen\_4\ X0 = k9\_prob\_1\ (u1\_struct\_0\ X0)\ (k1\_openlatt\ X0))$$