

## t33\_yellow\_6

(TMcn2SFMpvpYiFs6UgugrmT87XSt7z8NLBy)

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  $v4\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v7\_waybel\_0 : \iota \Rightarrow o$  be given. Let  $v1\_yellow\_6 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $l1\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_yellow\_6 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k10\_yellow\_6 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $m1\_connsp\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $k2\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc \\ & X0))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 \\ & X0))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow ((m1\_connsp\_2 \\ & X1 X0 X2) \Rightarrow (X2 \in X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow (\forall X1. \\ & ((\neg v2\_struct\_0 X1) \wedge ((v4\_orders\_2 X1) \wedge ((v7\_waybel\_0 X1) \wedge ((v1\_yellow\_6 \\ & X1 X0) \wedge (l1\_waybel\_0 X1 X0)))))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 \\ & X1)) \Rightarrow (k2\_waybel\_0 X0 X1 X2 = k4\_yellow\_6 X0 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \exists X1. m1\_subset\_1 X1 X0 \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge \\ & (l1\_pre\_topc X0))) \wedge (m1\_subset\_1 X1 (u1\_struct\_0 X0))) \Rightarrow (\forall X2. \\ & (m1\_connsp\_2 X2 X0 X1) \Rightarrow (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 \\ & X0)))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(l1\_struct\_0\ X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2\_struct\_0\ X0)\wedge(l1\_struct\_0\ X0))\wedge(l1\_waybel\_0\ X1\ X0))\Rightarrow(m1\_subset\_1\ (k4\_yellow\_6\ X0\ X1)\ (u1\_struct\_0\ X0)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\wedge((\neg v2\_struct\_0\ X1)\wedge((v4\_orders\_2\ X1)\wedge((v7\_waybel\_0\ X1)\wedge(l1\_waybel\_0\ X1\ X0))))))\Rightarrow(m1\_subset\_1\ (k10\_yellow\_6\ X0\ X1)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \quad (7)$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v4\_orders\_2\ X1)\wedge((v7\_waybel\_0\ X1)\wedge(l1\_waybel\_0\ X1\ X0)))))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow((X2 = k10\_yellow\_6\ X0\ X1)\Leftrightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0))\Rightarrow((X3 \in X2)\Leftrightarrow(\forall X4.(m1\_connspace\_2\ X4\ X0\ X3)\Rightarrow(r1\_waybel\_0\ X0\ X1\ X4))))))) \quad (8)$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_struct\_0\ X0))\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge(l1\_waybel\_0\ X1\ X0))\Rightarrow(\forall X2.(r1\_waybel\_0\ X0\ X1\ X2)\Leftrightarrow(\exists X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X1))\wedge(\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X1))\Rightarrow((r1\_orders\_2\ X1\ X3\ X4)\Rightarrow(k2\_waybel\_0\ X0\ X1\ X4 \in X2))))))) \quad (9)$$

**Theorem 1**

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v4\_orders\_2\ X1)\wedge((v7\_waybel\_0\ X1)\wedge((v1\_yellow\_6\ X1\ X0)\wedge(l1\_waybel\_0\ X1\ X0))))))\Rightarrow(k4\_yellow\_6\ X0\ X1 \in k10\_yellow\_6\ X0\ X1)$$