t87_tmap_1 (TMXSxU-govQ3XuuHkRZh6cT5VvFEQWfYgYyo)

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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 $m1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k4\_tmap\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v5\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k2\_tmap\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0))) \Rightarrow ((v1\_funct\_1\ (k3\_struct\_0\ X0))\wedge((v1\_funct\_2\ (k3\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)) \wedge (v5\_pre\_topc\ (k3\_struct\_0\ X0)\ X0\ X0))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(((\neg v2\_struct\_0\ X0) \wedge ((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0))) \wedge (((\neg v2\_struct\_0\ X1) \wedge ((v2\_pre\_topc\ X1) \wedge (l1\_pre\_topc\ X1))) \wedge (((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1)) \wedge ((v5\_pre\_topc\ X2\ X0\ X1) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1)))))))) \wedge ((\neg v2\_struct\_0\ X3) \wedge (m1\_pre\_topc\ X3\ X0))))) \Rightarrow ((v1\_funct\_1\ (k2\_tmap\_1\ X0\ X1\ X2\ X3)) \wedge ((v1\_funct\_2\ (k2\_tmap\_1\ X0\ X1\ X2\ X3)\ (u1\_struct\_0\ X3)\ (u1\_struct\_0\ X1)) \wedge (v5\_pre\_topc\ (k2\_tmap\_1\ X0\ X1\ X2\ X3)\ X3\ X1))) \tag{2}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (l1\_struct\_0\ X0) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge (l1\_pre\_topc\ X0)))\wedge(m1\_pre\_topc\ X1\ X0))\Rightarrow((v1\_funct\_1\ (k4\_tmap\_1\ X0\ X1))\wedge((v1\_funct\_2\ (k4\_tmap\_1\ X0\ X1)\ (u1\_struct\_0\ X1)\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ (k4\_tmap\_1\ X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X1)\ (u1\_struct\_0\ X0))))))) \tag{4}$$

Assume the following.

$$\forall X0.(l1\_struct\_0\ X0)\Rightarrow((v1\_funct\_1\ (k3\_struct\_0\ X0))\wedge((v1\_funct\_2\ (k3\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ (k3\_struct\_0\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)))))) \tag{5}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow(\forall X1.(m1\_pre\_topc\ X1\ X0)\Rightarrow(k4\_tmap\_1\ X0\ X1 = k2\_tmap\_1\ X0\ X0\ (k3\_struct\_0\ X0)\ X1)) \tag{6}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge(m1\_pre\_topc\ X1\ X0))\Rightarrow((v1\_funct\_1\ (k4\_tmap\_1\ X0\ X1))\wedge((v1\_funct\_2\ (k4\_tmap\_1\ X0\ X1)\ (u1\_struct\_0\ X1)\ (u1\_struct\_0\ X0))\wedge((v5\_pre\_topc\ (k4\_tmap\_1\ X0\ X1)\ X1\ X0)\wedge(m1\_subset\_1\ (k4\_tmap\_1\ X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X1)\ (u1\_struct\_0\ X0))))))))$$