t17_group_8 (TML8G7Jf2yQqkcSzQe7J32Bovqn5Urc8ktn)

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Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v15\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v2\_group\_1 : \iota \Rightarrow o$ be given. Let $v3\_group\_1 : \iota \Rightarrow o$ be given. Let $l3\_algstr\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $m1\_group\_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k11\_group\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k14\_group\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_struct\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v2\_group\_1\ X1)\wedge((v3\_group\_1\ X1)\wedge(l3\_algstr\_0\ X1))))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X1)))\Rightarrow(\forall X3.(m1\_group\_2\ X3\ X1)\Rightarrow((X0 \in k11\_group\_2\ X1\ X3\ X2)\Leftrightarrow(\exists X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X1))\wedge(\exists X5.(m1\_subset\_1\ X5\ (u1\_struct\_0\ X1))\wedge((X0 = k6\_algstr\_0\ X1\ X4\ X5)\wedge((X4 \in X2)\wedge(r1\_struct\_0\ X3\ X5)))))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X2)))\Rightarrow(m1\_subset\_1\ X0\ X2) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v2\_group\_1\ X1)\wedge((v3\_group\_1\ X1)\wedge(l3\_algstr\_0\ X1))))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X1))\Rightarrow(\forall X3.(m1\_group\_2\ X3\ X1)\Rightarrow((X0 \in k14\_group\_2\ X1\ X3\ X2)\Leftrightarrow(\exists X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X1))\wedge((X0 = k6\_algstr\_0\ X1\ X4\ X2)\wedge(r1\_struct\_0\ X3\ X4)))))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0\ X0)\wedge((v2\_group\_1\ X0)\wedge((v3\_group\_1\ X0)\wedge(l3\_algstr\_0\ X0))))\wedge((m1\_group\_2\ X1\ X0)\wedge(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))))\Rightarrow(m1\_subset\_1\ (k14\_group\_2\ X0\ X1\ X2)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \tag{4}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v15\_algstr\_0\ X0)\wedge((v2\_group\_1\ X0)\wedge((v3\_group\_1\ X0)\wedge(l3\_algstr\_0\ X0)))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow(\forall X3.((v15\_algstr\_0\ X3)\wedge(m1\_group\_2\ X3\ X0))\Rightarrow(\forall X4.((v15\_algstr\_0\ X4)\wedge(m1\_group\_2\ X4\ X0))\Rightarrow((X1\in k11\_group\_2\ X0\ X4\ (k14\_group\_2\ X0\ X3\ X2))\Leftrightarrow(\exists X5.(m1\_subset\_1\ X5\ (u1\_struct\_0\ X0))\wedge(\exists X6.(m1\_subset\_1\ X6\ (u1\_struct\_0\ X0))\wedge((X1=k6\_algstr\_0\ X0\ (k6\_algstr\_0\ X0\ X5\ X2)\ X6)\wedge((r1\_struct\_0\ X3\ X5)\wedge(r1\_struct\_0\ X4\ X6))))))))))$$