l7_homothet
(TMTxe69M9r3wqDbJDXAAg3tRjLpm8cuuhi9)

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Let $v7\_struct\_0 : \iota{\Rightarrow}o$ be given. Let $v1\_diraf : \iota{\Rightarrow}o$ be given. Let $v2\_diraf : \iota{\Rightarrow}o$ be given. Let $l1\_analoaf : \iota{\Rightarrow}o$ be given. Let $m1\_subset\_1 : \iota{\Rightarrow}\iota{\Rightarrow}o$ be given. Let $u1\_struct\_0 : \iota{\Rightarrow}\iota$ be given. Let $r1\_aff\_1 : \iota{\Rightarrow}\iota{\Rightarrow}\iota{\Rightarrow}\iota{\Rightarrow}o$ be given. Let $r2\_analoaf : \iota{\Rightarrow}\iota{\Rightarrow}\iota{\Rightarrow}\iota{\Rightarrow}\iota{\Rightarrow}o$ be given. Assume the following.

$$\forall X0.((\neg v7\_struct\_0\ X0)\wedge((v1\_diraf\ X0)\wedge(l1\_analoaf\ X0)))\Rightarrow$$
$$(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(\forall X2.(m1\_subset\_1$$
$$X2\ (u1\_struct\_0\ X0))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0$$
$$X0))\Rightarrow((r1\_aff\_1\ X0\ X1\ X2\ X3)\Rightarrow((r1\_aff\_1\ X0\ X1\ X3\ X2)\wedge((r1\_aff\_1$$
$$X0\ X2\ X1\ X3)\wedge((r1\_aff\_1\ X0\ X2\ X3\ X1)\wedge((r1\_aff\_1\ X0\ X3\ X1\ X2)\wedge(r1\_aff\_1$$
$$X0\ X3\ X2\ X1)))))))))$$

(1)

Assume the following.

$$\forall X0.((\neg v7\_struct\_0\ X0)\wedge((v1\_diraf\ X0)\wedge(l1\_analoaf\ X0)))\Rightarrow$$
$$(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(\forall X2.(m1\_subset\_1$$
$$X2\ (u1\_struct\_0\ X0))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0$$
$$X0))\Rightarrow(\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X0))\Rightarrow(\forall X5.$$
$$(m1\_subset\_1\ X5\ (u1\_struct\_0\ X0))\Rightarrow(((r1\_aff\_1\ X0\ X1\ X2\ X4)\wedge((r1\_aff\_1$$
$$X0\ X1\ X3\ X5)\wedge(X4 = X5)))\Rightarrow((r1\_aff\_1\ X0\ X1\ X2\ X3)\vee((X4 = X1)\wedge(X5 = X1)))))))))$$

(2)

Assume the following.

$$\forall X0.((\neg v7\_struct\_0\ X0)\wedge((v1\_diraf\ X0)\wedge(l1\_analoaf\ X0)))\Rightarrow$$
$$(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(\forall X2.(m1\_subset\_1$$
$$X2\ (u1\_struct\_0\ X0))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0$$
$$X0))\Rightarrow(\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X0))\Rightarrow((r2\_analoaf$$
$$X0\ X1\ X2\ X3\ X4)\Rightarrow((r2\_analoaf\ X0\ X1\ X2\ X4\ X3)\wedge((r2\_analoaf\ X0\ X2\ X1\ X3$$
$$X4)\wedge((r2\_analoaf\ X0\ X2\ X1\ X4\ X3)\wedge((r2\_analoaf\ X0\ X3\ X4\ X1\ X2)\wedge((r2\_analoaf$$
$$X0\ X3\ X4\ X2\ X1)\wedge((r2\_analoaf\ X0\ X4\ X3\ X1\ X2)\wedge(r2\_analoaf\ X0\ X4\ X3\ X2$$
$$X1)))))))))))))$$

(3)

Assume the following.

$$\forall X0.((\neg v7\_struct\_0\ X0) \wedge ((v1\_diraf\ X0) \wedge ((v2\_diraf\ X0) \wedge$$
$$(l1\_analoaf\ X0)))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0$$
$$X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X3.$$
$$(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X4.(m1\_subset\_1\ X4$$
$$(u1\_struct\_0\ X0)) \Rightarrow ((r2\_analoaf\ X0\ X1\ X2\ X3\ X4) \Rightarrow ((r1\_aff\_1\ X0\ X1$$
$$X2\ X3) \vee ((X3 = X4) \vee ((\neg r1\_aff\_1\ X0\ X3\ X4\ X1) \wedge ((\neg r1\_aff\_1\ X0\ X2\ X1\ X4) \wedge$$
$$(\neg r1\_aff\_1\ X0\ X4\ X3\ X2))))))))))$$

$$(4)$$

Theorem 1

$$\forall X0.((\neg v7\_struct\_0\ X0) \wedge ((v1\_diraf\ X0) \wedge ((v2\_diraf\ X0) \wedge$$
$$(l1\_analoaf\ X0)))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0$$
$$X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X3.$$
$$(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X4.(m1\_subset\_1\ X4$$
$$(u1\_struct\_0\ X0)) \Rightarrow (\forall X5.(m1\_subset\_1\ X5\ (u1\_struct\_0\ X0)) \Rightarrow$$
$$(((r1\_aff\_1\ X0\ X1\ X2\ X3) \wedge (r1\_aff\_1\ X0\ X1\ X2\ X4)) \Rightarrow ((X1 = X2) \vee ((X1 =$$
$$X3) \vee (((\neg (\neg r1\_aff\_1\ X0\ X1\ X2\ X5) \wedge ((r1\_aff\_1\ X0\ X1\ X5\ X4) \wedge (r2\_analoaf$$
$$X0\ X2\ X5\ X3\ X4))) \wedge (\neg (r1\_aff\_1\ X0\ X1\ X2\ X5) \wedge (\exists X6.(m1\_subset\_1$$
$$X6\ (u1\_struct\_0\ X0)) \wedge (\exists X7.(m1\_subset\_1\ X7\ (u1\_struct\_0$$
$$X0)) \wedge ((\neg r1\_aff\_1\ X0\ X1\ X2\ X6) \wedge ((r1\_aff\_1\ X0\ X1\ X6\ X7) \wedge ((r2\_analoaf$$
$$X0\ X2\ X6\ X3\ X7) \wedge ((r2\_analoaf\ X0\ X6\ X5\ X7\ X4) \wedge (r1\_aff\_1\ X0\ X1\ X2\ X4))))))))))) \vee$$
$$(r1\_aff\_1\ X0\ X1\ X2\ X5)))))))))$$