l17_homothet (TMZPPeCoRiumvPj4ScGxRqx737pnSo9K18M)

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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 $v4\_aff\_2 : \iota \Rightarrow o$ 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.

$$\forall X0.((\neg v7\_struct\_0\ X0) \wedge ((v1\_diraf\ X0) \wedge (l1\_analoaf\ X0))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X0)) \Rightarrow ((r2\_analoaf\ X0\ X1\ X2\ X3\ X4) \Rightarrow ((r2\_analoaf\ X0\ X1\ X2\ X4\ X3) \wedge ((r2\_analoaf\ X0\ X2\ X1\ X3\ X4) \wedge ((r2\_analoaf\ X0\ X2\ X1\ X4\ X3) \wedge ((r2\_analoaf\ X0\ X3\ X4\ X1\ X2) \wedge ((r2\_analoaf\ X0\ X3\ X4\ X2\ X1) \wedge ((r2\_analoaf\ X0\ X4\ X3\ X1\ X2) \wedge (r2\_analoaf\ X0\ X4\ X3\ X2\ X1)))))))))))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v7\_struct\_0\ X0) \wedge ((v1\_diraf\ X0) \wedge ((v2\_diraf\ X0) \wedge (l1\_analoaf\ X0)))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X5.(m1\_subset\_1\ X5\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X6.(m1\_subset\_1\ X6\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X7.(m1\_subset\_1\ X7\ (u1\_struct\_0\ X0)) \Rightarrow (((v4\_aff\_2\ X0) \wedge ((r1\_aff\_1\ X0\ X1\ X2\ X3) \wedge ((r1\_aff\_1\ X0\ X1\ X4\ X5) \wedge ((r2\_analoaf\ X0\ X2\ X4\ X3\ X5) \wedge (r1\_aff\_1\ X0\ X1\ X2\ X6))))) \Rightarrow ((X1 = X2) \vee ((r1\_aff\_1\ X0\ X1\ X2\ X4) \vee ((\forall X8.(m1\_subset\_1\ X8\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X9.(m1\_subset\_1\ X9\ (u1\_struct\_0\ X0)) \Rightarrow (\neg(\neg r1\_aff\_1\ X0\ X1\ X2\ X8) \wedge ((r1\_aff\_1\ X0\ X1\ X8\ X9) \wedge ((r2\_analoaf\ X0\ X2\ X8\ X3\ X9) \wedge ((r2\_analoaf\ X0\ X8\ X6\ X9\ X7) \wedge (r1\_aff\_1\ X0\ X1\ X2\ X7)))))))) \vee (r2\_analoaf\ X0\ X4\ X6\ X5\ X7))))))))))) \tag{2}$$

Theorem 1

$$\forall X0.((\neg v7\_struct\_0\ X0)\wedge((v1\_diraf\ X0)\wedge((v2\_diraf\ X0)\wedge (l1\_analoaf\ X0))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0))\Rightarrow(\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X0))\Rightarrow(\forall X5.(m1\_subset\_1\ X5\ (u1\_struct\_0\ X0))\Rightarrow(\forall X6.(m1\_subset\_1\ X6\ (u1\_struct\_0\ X0))\Rightarrow(\forall X7.(m1\_subset\_1\ X7\ (u1\_struct\_0\ X0))\Rightarrow(((v4\_aff\_2\ X0)\wedge((r1\_aff\_1\ X0\ X1\ X2\ X3)\wedge((r1\_aff\_1\ X0\ X1\ X2\ X4)\wedge((r1\_aff\_1\ X0\ X1\ X6\ X7)\wedge(r2\_analoaf\ X0\ X2\ X6\ X3\ X7)))))\Rightarrow((X1 = X2)\vee((\forall X8.(m1\_subset\_1\ X8\ (u1\_struct\_0\ X0))\Rightarrow(\forall X9.(m1\_subset\_1\ X9\ (u1\_struct\_0\ X0))\Rightarrow(\neg(\neg r1\_aff\_1\ X0\ X1\ X2\ X8)\wedge((r1\_aff\_1\ X0\ X1\ X8\ X9)\wedge((r2\_analoaf\ X0\ X2\ X8\ X3\ X9)\wedge((r2\_analoaf\ X0\ X8\ X4\ X9\ X5)\wedge(r1\_aff\_1\ X0\ X1\ X2\ X5)))))))\vee((r1\_aff\_1\ X0\ X1\ X2\ X6)\vee(r2\_analoaf\ X0\ X4\ X6\ X5\ X7)))))))))))$$