

t130_xcplx_1

(TMUeJvYRovswtb2E6v5W3j7yPPXJf7j38a6)

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Let $v1_xcplx_0 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k6_xcplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_xcplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xcplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow (\forall X2. \\ & (v1_xcplx_0 X2) \Rightarrow (k7_xcplx_0 X0 (k3_xcplx_0 X1 X2) = k7_xcplx_0 \\ & (k7_xcplx_0 X0 X1) X2))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow (\forall X2. \\ & (v1_xcplx_0 X2) \Rightarrow ((X0 \neq k6_numbers) \Rightarrow (k6_xcplx_0 (k7_xcplx_0 \\ & X1 X0) X2 = k7_xcplx_0 (k6_xcplx_0 X1 (k3_xcplx_0 X2 X0)) X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow (\forall X2. \\ & (v1_xcplx_0 X2) \Rightarrow (k6_xcplx_0 (k7_xcplx_0 X0 X1) (k7_xcplx_0 \\ & X2 X1) = k7_xcplx_0 (k6_xcplx_0 X0 X2) X1))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow ((\\ & X0 \neq k6_numbers) \Rightarrow (X1 = k7_xcplx_0 (k3_xcplx_0 X1 X0) X0))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_xcplx_0 X0) \wedge (v1_xcplx_0 X1)) \Rightarrow (\\ & v1_xcplx_0 (k7_xcplx_0 X0 X1)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_xcplx_0 X0) \wedge (v1_xcplx_0 X1)) \Rightarrow (\\ & v1_xcplx_0 (k6_xcplx_0 X0 X1)) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0)\wedge(v1_xcmplx_0 X1))\Rightarrow(v1_xcmplx_0 (k3_xcmplx_0 X0 X1)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0)\wedge(v1_xcmplx_0 X1))\Rightarrow(k3_xcmplx_0 X0 X1 = k3_xcmplx_0 X1 X0) \quad (8)$$

Theorem 1

$$\begin{aligned} &\forall X0.(v1_xcmplx_0 X0)\Rightarrow(\forall X1.(v1_xcmplx_0 X1)\Rightarrow(\forall X2. \\ &(v1_xcmplx_0 X2)\Rightarrow(\forall X3.(v1_xcmplx_0 X3)\Rightarrow(\neg(X0\neq k6_numbers)\wedge \\ &((X1\neq k6_numbers)\wedge(k6_xcmplx_0 (k7_xcmplx_0 X2 X0) (k7_xcmplx_0 \\ &X3 X1)\neq k7_xcmplx_0 (k6_xcmplx_0 (k3_xcmplx_0 X2 X1) (k3_xcmplx_0 \\ &X3 X0)) (k3_xcmplx_0 X0 X1)))))) \end{aligned}$$