

t123_xcplx_1
(TMU4nzuNeVkfRnWJGya7tBKyvif1k6kBQiL)

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

$$\begin{aligned} & \forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow (\forall X2. \\ & (v1_xcplx_0 X2) \Rightarrow (k3_xcplx_0 X0 (k6_xcplx_0 X1 X2) = k6_xcplx_0 \\ & (k3_xcplx_0 X0 X1) (k3_xcplx_0 X0 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow ((k6_xcplx_0 X0 X1 = k6_numbers) \Rightarrow (X0 = X1))) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow ((X0 \neq k6_numbers) \Rightarrow (X1 = k7_xcplx_0 (k3_xcplx_0 X1 X0) X0))) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow ((X0 \neq k6_numbers) \Rightarrow (k3_xcplx_0 (k7_xcplx_0 X1 X0) X0 = X1))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcplx_0 X0) \wedge (v1_xcplx_0 X1)) \Rightarrow (v1_xcplx_0 (k7_xcplx_0 X0 X1)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcplx_0 X0) \wedge (v1_xcplx_0 X1)) \Rightarrow (v1_xcplx_0 (k6_xcplx_0 X0 X1)) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow (\forall X2. \\ & (v1_xcplx_0 X2) \Rightarrow (\forall X3.(v1_xcplx_0 X3) \Rightarrow ((k7_xcplx_0 \\ & X2 X0 = k7_xcplx_0 X3 X1) \Rightarrow ((X0 = k6_numbers) \vee ((X1 = k6_numbers) \vee \\ & ((X0 = X1) \vee (k7_xcplx_0 X2 X0 = k7_xcplx_0 (k6_xcplx_0 X2 X3) (\\ & k6_xcplx_0 X0 X1)))))))))) \end{aligned}$$