

l27_xcplx_1

(TMHPFbZ34xx6o4b5MuamHJreTEzLdB78gKz)

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Let $v1_xcplx_0 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k3_xcplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_xcplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k5_xcplx_0 : \iota \Rightarrow \iota$ be given. Assume the following.

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

Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (k3_xcplx_0 np_1 X0 = X0) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcplx_0 X0) \wedge (v1_xcplx_0 X1)) \Rightarrow (v1_xcplx_0 (k7_xcplx_0 X0 X1)) \tag{3}$$

Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (v1_xcplx_0 (k5_xcplx_0 X0)) \tag{4}$$

Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow (k7_xcplx_0 X0 X1 = k3_xcplx_0 X0 (k5_xcplx_0 X1))) \tag{5}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow ((\\ & (X0 \neq k6_numbers) \Rightarrow ((X1 = k5_xcplx_0 X0) \Leftrightarrow (k3_xcplx_0 X0 X1 = np_1))) \wedge \\ & ((X0 = k6_numbers) \Rightarrow ((X1 = k5_xcplx_0 X0) \Leftrightarrow (X1 = k6_numbers)))))) \end{aligned} \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcplx_0 X0) \wedge (v1_xcplx_0 X1)) \Rightarrow (k3_xcplx_0 X0 X1 = k3_xcplx_0 X1 X0) \tag{7}$$

Theorem 1

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow ((X0 \neq k6_numbers) \Rightarrow (k3_xcmplx_0 (k7_xcmplx_0 X1 X0) X0 = X1)))$$