

t182_xcplx_1
(TMXLi4UnuwmQrieiWyt7tJDdSLw85jN1Zu5)

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Let $v1_xcplx_0 : \iota \Rightarrow o$ be given. Let $k3_xcplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k4_xcplx_0 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k7_xcplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow ((k3_xcplx_0 X1 X0 = X0) \Rightarrow ((X0 = k6_numbers) \vee (X1 = np_1)))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow ((k3_xcplx_0 X0 X1 = np_1) \Rightarrow (X0 = k7_xcplx_0 np_1 X1))) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (k3_xcplx_0 np_1 X0 = X0) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1_xcplx_0 X0) \wedge ((v1_xcplx_0 X1) \wedge (v1_xcplx_0 X2))) \Rightarrow (k3_xcplx_0 (k2_xcplx_0 X0 X1) X2 = k2_xcplx_0 (k3_xcplx_0 X0 X2) (k3_xcplx_0 X1 X2)) \quad (4)$$

Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (k3_xcplx_0 X0 (k4_xcplx_0 np_1) = k4_xcplx_0 X0) \quad (5)$$

Assume the following.

$$k7_xcplx_0 np_1 np_1 = np_1 \quad (6)$$

Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow (k3_xcplx_0 X0 (k7_xcplx_0 np_1 X1) = k7_xcplx_0 X0 X1)) \quad (7)$$

Assume the following.

$$k2_xcmplx_0 \ np_1 \ (k4_xcmplx_0 \ np_1) = k6_numbers \quad (8)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 \ X0) \Rightarrow (\forall X1.(v1_xcmplx_0 \ X1) \Rightarrow (k4_xcmplx_0 \ (k7_xcmplx_0 \ X0 \ X1) = k7_xcmplx_0 \ (k4_xcmplx_0 \ X0 \ X1))) \quad (9)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 \ X0) \Rightarrow (k4_xcmplx_0 \ (k4_xcmplx_0 \ X0) = X0) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 \ X0) \wedge (v1_xcmplx_0 \ X1)) \Rightarrow (v1_xcmplx_0 \ (k7_xcmplx_0 \ X0 \ X1)) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 \ X0) \wedge (v1_xcmplx_0 \ X1)) \Rightarrow (v1_xcmplx_0 \ (k3_xcmplx_0 \ X0 \ X1)) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 \ X0) \wedge (v1_xcmplx_0 \ X1)) \Rightarrow (v1_xcmplx_0 \ (k2_xcmplx_0 \ X0 \ X1)) \quad (13)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 \ X0) \Rightarrow (v1_xcmplx_0 \ (k4_xcmplx_0 \ X0)) \quad (14)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 \ X0) \Rightarrow (\forall X1.(v1_xcmplx_0 \ X1) \Rightarrow ((X1 = k4_xcmplx_0 \ X0) \Leftrightarrow (k2_xcmplx_0 \ X0 \ X1 = k6_numbers))) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 \ X0) \wedge (v1_xcmplx_0 \ X1)) \Rightarrow (k3_xcmplx_0 \ X0 \ X1 = k3_xcmplx_0 \ X1 \ X0) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 \ X0) \wedge (v1_xcmplx_0 \ X1)) \Rightarrow (k2_xcmplx_0 \ X0 \ X1 = k2_xcmplx_0 \ X1 \ X0) \quad (17)$$

Theorem 1

$$\forall X0.(v1_xcmplx_0 \ X0) \Rightarrow (\neg(k3_xcmplx_0 \ X0 \ X0 = np_1) \wedge ((X0 \neq np_1) \wedge (X0 \neq k4_xcmplx_0 \ np_1)))$$