

t115\_xcplx\_1

(TMTnga24fbdgPNoBDLjm3m7CfbmF3r9b6zW)

October 27, 2020

Let  $v1\_xcplx\_0 : \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k2\_xcplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  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.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. ((v1\_xcplx\_0 X0) \wedge ((v1\_xcplx\_0 \\ X1) \wedge (v1\_xcplx\_0 X2))) \Rightarrow (k3\_xcplx\_0 (k2\_xcplx\_0 X0 X1) X2 = k2\_xcplx\_0 \\ (k3\_xcplx\_0 X0 X2) (k3\_xcplx\_0 X1 X2)) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. (v1\_xcplx\_0 X0) \Rightarrow (\forall X1. (v1\_xcplx\_0 X1) \Rightarrow ((X0 \neq k6\_numbers) \Rightarrow (X1 = k7\_xcplx\_0 (k3\_xcplx\_0 X1 X0) X0))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_xcplx\_0 X0) \wedge (v1\_xcplx\_0 X1)) \Rightarrow (v1\_xcplx\_0 (k2\_xcplx\_0 X0 X1)) \quad (3)$$

**Theorem 1**

$$\begin{aligned} \forall X0. (v1\_xcplx\_0 X0) \Rightarrow (\forall X1. (v1\_xcplx\_0 X1) \Rightarrow (\forall X2. \\ (v1\_xcplx\_0 X2) \Rightarrow ((X0 \neq k6\_numbers) \Rightarrow (k2\_xcplx\_0 X1 X2 = k7\_xcplx\_0 \\ (k2\_xcplx\_0 (k3\_xcplx\_0 X1 X0) (k3\_xcplx\_0 X2 X0)) X0)))) \end{aligned}$$