

t21_arytm_0
(TMN7YBvSX4evRbadpNwWyPbu7sH17HZ12RV)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k2_arytm_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k4_arytm_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 k1_numbers) \Rightarrow ((X1 \neq k6_numbers) \Rightarrow (k2_arytm_0 (k2_arytm_0 X0 \\ X1) (k4_arytm_0 X1) = X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 k1_numbers) \Rightarrow ((X1 = k6_numbers) \Rightarrow (k2_arytm_0 X0 X1 = k6_numbers))) \end{aligned} \quad (2)$$

Assume the following.

$$m1_subset_1 k6_numbers k1_numbers \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((m1_subset_1 X0 k1_numbers) \wedge (m1_subset_1 \\ X1 k1_numbers)) \Rightarrow (k2_arytm_0 X0 X1 = k2_arytm_0 X1 X0) \end{aligned} \quad (4)$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 k1_numbers) \Rightarrow (\neg(k2_arytm_0 X0 X1 = k6_numbers) \wedge ((X0 \neq k6_numbers) \wedge \\ (X1 \neq k6_numbers)))) \end{aligned}$$