

l14_xreal_0

(TMW5DiGHdnfWUhmCDQL8392AhvLmDpWF6Xm)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $k5_arytm_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_arytm_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & ((v2_xxreal_0\ np_1) \wedge (m2_subset_1\ np_1\ k1_numbers\ k5_numbers)) \wedge \\ & ((m1_subset_1\ np_1\ k5_numbers) \wedge (m1_subset_1\ np_1\ k1_numbers)) \end{aligned} \quad (1)$$

Assume the following.

$$k2_xcmplx_0\ np_1\ (k4_xcmplx_0\ np_1) = k6_numbers \quad (2)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0\ X0) \Rightarrow (v1_xcmplx_0\ (k4_xcmplx_0\ X0)) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xcmplx_0\ X0) \Rightarrow (\forall X1.(v1_xcmplx_0\ X1) \Rightarrow (\forall X2. \\ & (X2 = k2_xcmplx_0\ X0\ X1) \Leftrightarrow (\exists X3.(m1_subset_1\ X3\ k1_numbers) \wedge \\ & (\exists X4.(m1_subset_1\ X4\ k1_numbers) \wedge (\exists X5.(m1_subset_1 \\ & X5\ k1_numbers) \wedge (\exists X6.(m1_subset_1\ X6\ k1_numbers) \wedge ((X0 = \\ & k5_arytm_0\ X3\ X4) \wedge ((X1 = k5_arytm_0\ X5\ X6) \wedge (X2 = k5_arytm_0\ (k1_arytm_0 \\ & X3\ X5)\ (k1_arytm_0\ X4\ X6)))))))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k1_numbers) \Rightarrow (v1_xcmplx_0\ X0) \quad (5)$$

Theorem 1

$$\begin{aligned} & \exists X0.(m1_subset_1\ X0\ k1_numbers) \wedge (\exists X1.(m1_subset_1 \\ & X1\ k1_numbers) \wedge (\exists X2.(m1_subset_1\ X2\ k1_numbers) \wedge (\exists X3. \\ & (m1_subset_1\ X3\ k1_numbers) \wedge ((np_1 = k5_arytm_0\ X0\ X1) \wedge ((k4_xcmplx_0 \\ & np_1 = k5_arytm_0\ X2\ X3) \wedge (k6_numbers = k5_arytm_0\ (k1_arytm_0 \\ & X0\ X2)\ (k1_arytm_0\ X1\ X3)))))) \end{aligned}$$