

t63_real_3

(TMa5K3qQwBHcEBFeTv43aqWXDbqk3Pr9DcP)

October 27, 2020

Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k10_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k5_real_3 : \iota \Rightarrow \iota$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k6_real_3 : \iota \Rightarrow \iota$ be given. Let $k7_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_real_3 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow & ((v1_funct_1 (k6_real_3 X0)) \wedge ((v1_funct_2 \\ & (k6_real_3 X0) k5_numbers k1_numbers) \wedge (m1_subset_1 (k6_real_3 \\ & X0) (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow & ((v1_funct_1 (k5_real_3 X0)) \wedge ((v1_funct_2 \\ & (k5_real_3 X0) k5_numbers k1_numbers) \wedge (m1_subset_1 (k5_real_3 \\ & X0) (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow & (\forall X1.((v1_funct_1 X1) \wedge ((v1_funct_2 \\ & X1 k5_numbers k1_numbers) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers k1_numbers)))))) \Rightarrow ((X1 = k6_real_3 X0) \Leftrightarrow ((k3_funct_2 \\ & k5_numbers k1_numbers X1 k6_numbers = np_1) \wedge ((k3_funct_2 k5_numbers \\ & k1_numbers X1 np_1 = k3_funct_2 k5_numbers k1_numbers (k4_real_3 \\ & X0) np_1) \wedge (\forall X2.(v7_ordinal1 X2) \Rightarrow (k3_funct_2 k5_numbers \\ & k1_numbers X1 (k1_nat_1 X2 np_2) = k7_real_1 (k8_real_1 (k3_funct_2 \\ & k5_numbers k1_numbers (k4_real_3 X0) (k1_nat_1 X2 np_2)) (k3_funct_2 \\ & k5_numbers k1_numbers X1 (k1_nat_1 X2 np_1))) (k1_seq_1 X1 X2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned}
& \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge ((v1_funct_2 \\
& X1 k5_numbers k1_numbers) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k5_numbers k1_numbers)))))) \Rightarrow ((X1 = k5_real_3 X0) \Leftrightarrow ((k3_funct_2 \\
& k5_numbers k1_numbers X1 k6_numbers = k3_funct_2 k5_numbers k1_numbers \\
& (k4_real_3 X0) k6_numbers) \wedge ((k3_funct_2 k5_numbers k1_numbers \\
& X1 np_1 = k7_real_1 (k8_real_1 (k3_funct_2 k5_numbers k1_numbers \\
& (k4_real_3 X0) np_1) (k3_funct_2 k5_numbers k1_numbers (k4_real_3 \\
& X0) k6_numbers)) np_1) \wedge (\forall X2.(v7_ordinal1 X2) \Rightarrow (k3_funct_2 \\
& k5_numbers k1_numbers X1 (k1_nat_1 X2 np_2) = k7_real_1 (k8_real_1 \\
& (k3_funct_2 k5_numbers k1_numbers (k4_real_3 X0) (k1_nat_1 X2 \\
& np_2)) (k3_funct_2 k5_numbers k1_numbers X1 (k1_nat_1 X2 np_1))) \\
& (k1_seq_1 X1 X2))))))
\end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (k10_real_1 \\
& (k3_funct_2 k5_numbers k1_numbers (k5_real_3 X1) (k1_nat_1 X0 \\
& np_2)) (k3_funct_2 k5_numbers k1_numbers (k6_real_3 X1) (k1_nat_1 \\
& X0 np_2)) = k10_real_1 (k7_real_1 (k8_real_1 (k3_funct_2 k5_numbers \\
& k1_numbers (k4_real_3 X1) (k1_nat_1 X0 np_2)) (k3_funct_2 k5_numbers \\
& k1_numbers (k5_real_3 X1) (k1_nat_1 X0 np_1))) (k1_seq_1 (k5_real_3 \\
& X1) X0)) (k7_real_1 (k8_real_1 (k3_funct_2 k5_numbers k1_numbers \\
& (k4_real_3 X1) (k1_nat_1 X0 np_2)) (k3_funct_2 k5_numbers k1_numbers \\
& (k6_real_3 X1) (k1_nat_1 X0 np_1))) (k1_seq_1 (k6_real_3 X1) X0))))
\end{aligned}$$