

t31_clopban3

(TMZcuwhxH16f3faEgniT3nEhcNUETc4gxjj)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_normsp_0 : \iota \Rightarrow o$ be given. Let $v4_normsp_0 : \iota \Rightarrow o$ be given. Let $v2_clvect_1 : \iota \Rightarrow o$ be given. Let $v3_clvect_1 : \iota \Rightarrow o$ be given. Let $v4_clvect_1 : \iota \Rightarrow o$ be given. Let $v5_clvect_1 : \iota \Rightarrow o$ be given. Let $v8_clvect_1 : \iota \Rightarrow o$ be given. Let $l2_clvect_1 : \iota \Rightarrow o$ 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 $k5_numbers : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ 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 $k1_numbers : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_power : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_normsp_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $v1_series_1 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Let $l2_normsp_0 : \iota \Rightarrow o$ be given. Let $l1_normsp_0 : \iota \Rightarrow o$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_clvect_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\ & X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v3_normsp_0 X0) \wedge \\ & ((v4_normsp_0 X0) \wedge ((v2_clvect_1 X0) \wedge ((v3_clvect_1 X0) \wedge ((v4_clvect_1 \\ & X0) \wedge ((v5_clvect_1 X0) \wedge ((v8_clvect_1 X0) \wedge (l2_clvect_1 X0)))))))))) \Rightarrow \\ & (\forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers (u1_struct_0 \\ & X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (u1_struct_0 \\ & X0)))))) \Rightarrow (\forall X2. (m2_subset_1 X2 k1_numbers k5_numbers) \Rightarrow \\ & (r1_xxreal_0 k6_numbers (k1_seq_1 (k4_normsp_0 X0 X1) X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 \ k5_numbers \ k1_numbers) \wedge \\
& (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \ k5_numbers \ k1_numbers)))))) \Rightarrow \\
& (\forall X1.((v1_funct_1 X1) \wedge ((v1_funct_2 X1 \ k5_numbers \ k1_numbers) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \ k5_numbers \ k1_numbers)))))) \Rightarrow \\
& (\neg(\forall X2.(m2_subset_1 X2 \ k1_numbers \ k5_numbers) \Rightarrow ((r1_xxreal_0 \\
& \ k6_numbers \ (k3_funct_2 \ k5_numbers \ k1_numbers \ X0 \ X2)) \wedge (k3_funct_2 \\
& \ k5_numbers \ k1_numbers \ X1 \ X2 = k2_power \ X2 \ (k3_funct_2 \ k5_numbers \\
& \ k1_numbers \ X0 \ X2)))))) \wedge ((\exists X2.(m2_subset_1 X2 \ k1_numbers \\
& \ k5_numbers) \wedge (\forall X3.(m2_subset_1 X3 \ k1_numbers \ k5_numbers) \Rightarrow \\
& ((r1_xxreal_0 X2 \ X3) \Rightarrow (r1_xxreal_0 \ np_1 \ (k3_funct_2 \ k5_numbers \\
& \ k1_numbers \ X1 \ X3)))))) \wedge (v1_series_1 X0)))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\
& \ X2 \ X0 \ X1) \Leftrightarrow (m1_subset_1 X2 \ X1))
\end{aligned} \tag{3}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1_xboole_0 X0) \wedge \\
& (((v1_funct_1 X2) \wedge ((v1_funct_2 X2 \ X0 \ X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\
& \ (k2_zfmisc_1 \ X0 \ X1)))))) \wedge (m1_subset_1 X3 \ X0))) \Rightarrow (k3_funct_2 \ X0 \\
& \ X1 \ X2 \ X3 = k1_funct_1 X2 \ X3)
\end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v3_valued_0 \\
& \ X0))) \Rightarrow (k1_seq_1 X0 \ X1 = k1_funct_1 X0 \ X1)
\end{aligned} \tag{6}$$

Assume the following.

$$(\neg v1_xboole_0 \ k4_ordinal1) \wedge (v3_ordinal1 \ k4_ordinal1) \tag{7}$$

Assume the following.

$$v3_membered \ k1_numbers \tag{8}$$

Assume the following.

$$\forall X0.(l2_normsp_0 X0) \Rightarrow ((l1_normsp_0 X0) \wedge (l2_struct_0 X0)) \tag{9}$$

Assume the following.

$$\forall X0.(l2_clvect_1 X0) \Rightarrow ((l1_clvect_1 X0) \wedge (l2_normsp_0 X0)) \tag{10}$$

Assume the following.

$$m1_subset_1 \ k5_numbers \ (k1_zfmisc_1 \ k1_numbers) \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 \ X0) \wedge (l1_normsp_0 \ X0)) \wedge \\ & ((v1_funct_1 \ X1) \wedge ((v1_funct_2 \ X1 \ k5_numbers \ (u1_struct_0 \ X0)) \wedge \\ & (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k5_numbers \ (u1_struct_0 \\ & X0)))))) \Rightarrow ((v1_funct_1 \ (k4_normsp_0 \ X0 \ X1)) \wedge ((v1_funct_2 \ (k4_normsp_0 \\ & X0 \ X1) \ k5_numbers \ k1_numbers) \wedge (m1_subset_1 \ (k4_normsp_0 \ X0 \ X1) \\ & (k1_zfmisc_1 \ (k2_zfmisc_1 \ k5_numbers \ k1_numbers)))))) \end{aligned} \quad (12)$$

Assume the following.

$$\forall X0. (v1_xboole_0 \ X0) \Rightarrow (\forall X1. (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0)) \Rightarrow (v1_xboole_0 \ X1)) \quad (13)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ X0 \ X1))) \Rightarrow (v1_relat_1 \ X2) \quad (14)$$

Assume the following.

$$\forall X0. \forall X1. (v3_membered \ X1) \Rightarrow (\forall X2. (m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ X0 \ X1))) \Rightarrow (v3_valued_0 \ X2)) \quad (15)$$

Theorem 1

$$\begin{aligned} & \forall X0. (((\neg v2_struct_0 \ X0) \wedge ((v13_algstr_0 \ X0) \wedge ((v2_rlvect_1 \\ & X0) \wedge ((v3_rlvect_1 \ X0) \wedge ((v4_rlvect_1 \ X0) \wedge ((v3_normsp_0 \ X0) \wedge \\ & ((v4_normsp_0 \ X0) \wedge ((v2_clvect_1 \ X0) \wedge ((v3_clvect_1 \ X0) \wedge ((v4_clvect_1 \\ & X0) \wedge ((v5_clvect_1 \ X0) \wedge ((v8_clvect_1 \ X0) \wedge (l2_clvect_1 \ X0)))))))))) \Rightarrow \\ & (\forall X1. ((v1_funct_1 \ X1) \wedge ((v1_funct_2 \ X1 \ k5_numbers \ (u1_struct_0 \\ & X0)) \wedge (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k5_numbers \ (u1_struct_0 \\ & X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 \ X2) \wedge ((v1_funct_2 \ X2 \ k5_numbers \\ & k1_numbers) \wedge (m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k5_numbers \\ & k1_numbers)))))) \Rightarrow (\neg (\forall X3. (m2_subset_1 \ X3 \ k1_numbers \ k5_numbers) \Rightarrow \\ & (k1_seq_1 \ X2 \ X3 = k2_power \ X3 \ (k1_seq_1 \ (k4_normsp_0 \ X0 \ X1) \ X3))) \wedge \\ & ((\exists X3. (m2_subset_1 \ X3 \ k1_numbers \ k5_numbers) \wedge (\forall X4. \\ & (m2_subset_1 \ X4 \ k1_numbers \ k5_numbers) \Rightarrow ((r1_xxreal_0 \ X3 \ X4) \Rightarrow \\ & (r1_xxreal_0 \ np_1 \ (k1_seq_1 \ X2 \ X4)))))) \wedge (v1_series_1 \ (k4_normsp_0 \\ & X0 \ X1)))))) \end{aligned}$$