

t3_comseq_1 (TML-
bipZPCBD2WtFo5U7gjJMekD4nTqUMZtf)

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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 $k2_numbers : \iota$ 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 $v2_relat_1 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_complex1 : \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (((v1_funct_1 \\ X0) \wedge ((v1_funct_2 X0 k5_numbers k2_numbers) \wedge (m1_subset_1 X0 (\\ k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers)))))) \Leftrightarrow ((k9_xtuple_0 \\ X0 = k5_numbers) \wedge (\forall X1. (m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow \\ (m1_subset_1 (k1_funct_1 X0 X1) k2_numbers))) \end{aligned} \quad (1)$$

Assume the following.

$$k5_complex1 = k1_xboole_0 \quad (2)$$

Assume the following.

$$\forall X0. (v1_relat_1 X0) \Rightarrow ((v2_relat_1 X0) \Leftrightarrow (\neg k1_xboole_0 \in k10_xtuple_0 X0)) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. (X1 = \\ k10_xtuple_0 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (\exists X3. (X3 \in k9_xtuple_0 \\ X0) \wedge (X2 = k1_funct_1 X0 X3)))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 \\ (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 \ k5_numbers \ k2_numbers) \wedge \\ & (m1_subset_1 X0 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k5_numbers \ k2_numbers)))))) \Rightarrow \\ & ((v2_relat_1 X0) \Leftrightarrow (\forall X1. \neg (X1 \in k5_numbers) \wedge (k1_funct_1 \\ & \quad X0 \ X1 = k5_complex1))) \end{aligned}$$