

t16_comseq_2

(TMR9dYyWTS5jkbCPHYHqq3q2kiJmPRA5ZV)

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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 $v2_comseq_2 : \iota \Rightarrow o$ 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 $k3_comseq_2 : \iota \Rightarrow \iota$ be given. Let $k2_comseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k15_complex1 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Let $k1_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (k15_complex1 \\ (k2_xcmplx_0 X0 X1) = k8_complex1 (k15_complex1 X0) (k15_complex1 \\ X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k2_numbers) \wedge \\ ((v2_comseq_2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ k5_numbers k2_numbers)))))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge (\\ (v1_funct_2 X1 k5_numbers k2_numbers) \wedge ((v2_comseq_2 X1) \wedge (m1_subset_1 \\ X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers)))))) \Rightarrow (k3_comseq_2 \\ (k2_valued_1 k5_numbers k2_numbers k2_numbers X0 X1) = k8_complex1 \\ (k3_comseq_2 X0) (k3_comseq_2 X1))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k2_numbers) \wedge \\ (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers)))))) \Rightarrow \\ ((v2_comseq_2 X0) \Rightarrow (k3_comseq_2 (k2_comseq_2 k5_numbers X0) = \\ k15_complex1 (k3_comseq_2 X0))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k2_numbers) \wedge (m1_subset_1 \\ X1 k2_numbers)) \Rightarrow (k8_complex1 X0 X1 = k2_xcmplx_0 X0 X1) \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.((v1_membered \\ & X1)\wedge((v1_membered X2)\wedge(((v1_funct_1 X3)\wedge(m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))))\wedge((v1_funct_1 X4)\wedge(m1_subset_1 X4 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X2))))))\Rightarrow(k2_valued_1 X0 X1 X2 X3 X4 = k1_valued_1 \\ & X3 X4) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((v1_funct_1 X0)\wedge((v1_funct_2 X0 k5_numbers \\ & k2_numbers)\wedge((v2_comseq_2 X0)\wedge(m1_subset_1 X0 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k5_numbers k2_numbers))))))\wedge((v1_funct_1 X1)\wedge \\ & ((v1_funct_2 X1 k5_numbers k2_numbers)\wedge((v2_comseq_2 X1)\wedge(m1_subset_1 \\ & X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers))))))\Rightarrow(\\ & (v1_funct_1 (k1_valued_1 X0 X1))\wedge((v1_funct_2 (k1_valued_1 X0 \\ & X1) k5_numbers k2_numbers)\wedge(v2_comseq_2 (k1_valued_1 X0 X1)))) \end{aligned} \quad (6)$$

Assume the following.

$$v1_membered k2_numbers \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 X0)\wedge((v1_funct_2 X0 k5_numbers k2_numbers)\wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers))))\Rightarrow \\ & (m1_subset_1 (k3_comseq_2 X0) k2_numbers) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.((v1_membered \\ & X1)\wedge((v1_membered X2)\wedge(((v1_funct_1 X3)\wedge(m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))))\wedge((v1_funct_1 X4)\wedge(m1_subset_1 X4 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X2))))))\Rightarrow((v1_funct_1 (k2_valued_1 X0 X1 X2 X3 \\ & X4))\wedge(m1_subset_1 (k2_valued_1 X0 X1 X2 X3 X4) (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 k2_numbers)))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k2_numbers)\Rightarrow(v1_xcmplx_0 X0) \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_funct_1 X0)\wedge((v1_funct_2 X0 k5_numbers k2_numbers)\wedge \\ & ((v2_comseq_2 X0)\wedge(m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers k2_numbers))))))\Rightarrow(\forall X1.((v1_funct_1 X1)\wedge(\\ & (v1_funct_2 X1 k5_numbers k2_numbers)\wedge((v2_comseq_2 X1)\wedge(m1_subset_1 \\ & X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers))))))\Rightarrow(k3_comseq_2 \\ & (k2_comseq_2 k5_numbers (k2_valued_1 k5_numbers k2_numbers k2_numbers \\ & X0 X1)) = k8_complex1 (k15_complex1 (k3_comseq_2 X0)) (k15_complex1 \\ & (k3_comseq_2 X1)))) \end{aligned}$$