

t20_comseq_2 (TM- brsn9WZqFbk6w8F8CpZ8cwrHBHwDXvUo)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ 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 $k5_numbers : \iota$ be given. Let $v2_comseq_2 : \iota \Rightarrow o$ 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 $k25_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k15_complex1 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Let $k24_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. (v1_xcmplx_0 X0) \Rightarrow (\forall X1. (v1_xcmplx_0 X1) \Rightarrow (k15_complex1 \\ (k3_xcmplx_0 X0 X1) = k9_complex1 (k15_complex1 X0) (k15_complex1 \\ X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k2_numbers) \wedge \\ ((v2_comseq_2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ k5_numbers k2_numbers)))))) \Rightarrow (\forall X1. (v1_xcmplx_0 X1) \Rightarrow (\\ k3_comseq_2 (k25_valued_1 k5_numbers k2_numbers X0 X1) = k3_xcmplx_0 \\ X1 (k3_comseq_2 X0))) \end{aligned} \tag{2}$$

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.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. \forall X3. ((v1_membered X1) \wedge \\ (((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ X0 X1)))) \wedge (v1_xcmplx_0 X3))) \Rightarrow (k25_valued_1 X0 X1 X2 X3 = k24_valued_1 \\ X2 X3) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers \\ & k2_numbers) \wedge ((v2_comseq_2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k5_numbers k2_numbers)))))) \wedge (v1_xcmplx_0 X1)) \Rightarrow \\ & ((v1_funct_1 (k24_valued_1 X0 X1)) \wedge ((v1_funct_2 (k24_valued_1 \\ & X0 X1) k5_numbers k2_numbers) \wedge (v2_comseq_2 (k24_valued_1 X0 X1)))) \end{aligned} \quad (5)$$

Assume the following.

$$v1_membered k2_numbers \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k2_numbers) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers)))) \Rightarrow \\ & (m1_subset_1 (k3_comseq_2 X0) k2_numbers) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1_membered X1) \wedge \\ & (((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X1)))) \wedge (v1_xcmplx_0 X3)) \Rightarrow ((v1_funct_1 (k25_valued_1 X0 X1 \\ & X2 X3)) \wedge (m1_subset_1 (k25_valued_1 X0 X1 X2 X3) (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 k2_numbers)))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0. (v1_membered X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow (v1_xcmplx_0 X1)) \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 k2_numbers) \Rightarrow (\forall X1. ((v1_funct_1 \\ & X1) \wedge ((v1_funct_2 X1 k5_numbers k2_numbers) \wedge ((v2_comseq_2 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers)))))) \Rightarrow \\ & (k3_comseq_2 (k2_comseq_2 k5_numbers (k25_valued_1 k5_numbers \\ & k2_numbers X1 X0)) = k9_complex1 (k15_complex1 X0) (k15_complex1 \\ & (k3_comseq_2 X1)))) \end{aligned}$$