

t11_complsp2 (TMG58NtafFfcplgKjKfJXNgvNPpkxJyRbXf)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $m2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ be given. Let $k4_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_complsp2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k19_binop_2 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k11_seq_4 : \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $m1_finseq_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k24_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k30_valued_1 : \iota \Rightarrow \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_finseq_2 \ X1 \ X0) \Rightarrow (\forall X2. (m2_finseq_2 \\ & \quad X2 \ X0 \ X1) \Leftrightarrow (m1_subset_1 \ X2 \ X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 \ X1 \ X0) \Leftrightarrow (m1_finseq_1 \ X1 \ X0) \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((m1_subset_1 \ X0 \ k5_numbers) \wedge \\ & ((m1_subset_1 \ X1 \ (k4_finseq_2 \ X0 \ k2_numbers)) \wedge (v1_xcmplx_0 \ X2))) \Rightarrow \\ & (k4_complsp2 \ X0 \ X1 \ X2 = k24_valued_1 \ X1 \ X2) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow (k19_binop_2 X0 = k4_xcmplx_0 X0) \quad (6)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k2_numbers) \Rightarrow (k11_seq_4 X0 = k30_valued_1 X0) \quad (7)$$

Assume the following.

$$v6_membered k4_ordinal1 \quad (8)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((v1_xcmplx_0 (k4_xcmplx_0 X0)) \wedge (v1_xreal_0 (k4_xcmplx_0 X0))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_2 X1 X0) \Rightarrow (\forall X2.(m2_finseq_2 X2 X0 X1) \Rightarrow (m2_finseq_1 X2 X0)) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge (v1_funct_1 X1) \wedge (v1_finseq_1 X1)) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.(v7_ordinal1 X0) \Rightarrow (m1_finseq_2 (k4_finseq_2 X0 X1) X1) \quad (12)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 X0))) \Rightarrow (k30_valued_1 X0 = k24_valued_1 X0 (k4_xcmplx_0 np_1)) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0) \Rightarrow (v5_relat_1 X1 X0) \quad (14)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v5_relat_1 X0 k2_numbers)) \Rightarrow ((v1_relat_1 X0) \wedge (v1_valued_0 X0)) \quad (15)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (16)$$

Assume the following.

$$\forall X0.(v6_membered\ X0) \Rightarrow (v5_membered\ X0) \quad (17)$$

Assume the following.

$$\forall X0.(v6_membered\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ X0) \Rightarrow (v7_ordinal1\ X1)) \quad (18)$$

Assume the following.

$$\forall X0.(v5_membered\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ X0) \Rightarrow (v1_int_1\ X1)) \quad (19)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1\ X0\ k5_numbers) \Rightarrow (\forall X1.(m2_finseq_2 \\ & X1\ k2_numbers\ (k4_finseq_2\ X0\ k2_numbers)) \Rightarrow (k4_complsp2\ X0\ X1 \\ & (k19_binop_2\ np_1) = k11_seq_4\ X1)) \end{aligned}$$