

t49_rfunct_2

(TMLsF4u1SNwioBiDp4qN76Vz8zbDnCnDVjg)

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Let $v1_funct_1 : \iota \Rightarrow o$ 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 $k1_numbers : \iota$ be given. Let $v7_valued_0 : \iota \Rightarrow o$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v8_valued_0 : \iota \Rightarrow o$ be given. Let $k32_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k26_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $np_0 : \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Let $k30_valued_1 : \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k24_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 k1_numbers) \Rightarrow (\forall X2. \\ & ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers \\ & k1_numbers)))) \Rightarrow (((v7_valued_0 (k2_partfun1 k1_numbers k1_numbers \\ & X2 X0)) \wedge (r1_xxreal_0 k6_numbers X1)) \Rightarrow (v7_valued_0 (k2_partfun1 \\ & k1_numbers k1_numbers (k26_valued_1 k1_numbers k1_numbers X2 \\ & X1) X0))) \wedge (((v7_valued_0 (k2_partfun1 k1_numbers k1_numbers \\ & X2 X0)) \wedge (r1_xxreal_0 X1 k6_numbers)) \Rightarrow (v8_valued_0 (k2_partfun1 \\ & k1_numbers k1_numbers (k26_valued_1 k1_numbers k1_numbers X2 \\ & X1) X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \quad (3)$$

Assume the following.

$$v1_xboole_0 \text{ } np_0 \quad (4)$$

Assume the following.

$$r1_xxreal_0 (k4_xcmplx_0 \text{ } np_1) \text{ } np_0 \quad (5)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.((v3_membered \text{ } X1)\wedge((v1_funct_1 \\ X2)\wedge(m1_subset_1 \text{ } X2 (k1_zfmisc_1 (k2_zfmisc_1 \text{ } X0 \text{ } X1))))))\Rightarrow(k32_valued_1 \\ X0 \text{ } X1 \text{ } X2 = k30_valued_1 \text{ } X2) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.\forall X3.((v3_membered \text{ } X1)\wedge \\ (((v1_funct_1 \text{ } X2)\wedge(m1_subset_1 \text{ } X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ X0 \text{ } X1)))))\wedge(v1_xreal_0 \text{ } X3))\Rightarrow(k26_valued_1 \text{ } X0 \text{ } X1 \text{ } X2 \text{ } X3 = k24_valued_1 \\ X2 \text{ } X3) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 \text{ } X0 \text{ } k1_numbers)\Rightarrow(k1_real_1 \text{ } X0 = k4_xcmplx_0 \text{ } X0) \quad (9)$$

Assume the following.

$$v3_membered \text{ } k1_numbers \quad (10)$$

Assume the following.

$$\forall X0.(m1_subset_1 \text{ } X0 \text{ } k1_numbers)\Rightarrow(m1_subset_1 (k1_real_1 \\ X0) \text{ } k1_numbers) \quad (11)$$

Assume the following.

$$\forall X0.((v1_relat_1 \text{ } X0)\wedge((v1_funct_1 \text{ } X0)\wedge(v1_valued_0 \text{ } X0)))\Rightarrow \\ (k30_valued_1 \text{ } X0 = k24_valued_1 \text{ } X0 (k4_xcmplx_0 \text{ } np_1)) \quad (12)$$

Assume the following.

$$\forall X0.((v1_relat_1 \text{ } X0)\wedge(v3_valued_0 \text{ } X0))\Rightarrow((v1_relat_1 \\ X0)\wedge(v1_valued_0 \text{ } X0)) \quad (13)$$

Assume the following.

$$\forall X0.((v1_relat_1 \text{ } X0)\wedge(v5_relat_1 \text{ } X0 \text{ } k1_numbers))\Rightarrow((v1_relat_1 \\ X0)\wedge(v3_valued_0 \text{ } X0)) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow((v4_relat_1 X2 X0)\wedge(v5_relat_1 X2 X1)) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (16)$$

Assume the following.

$$\forall X0.(v3_membered X0)\Rightarrow(\forall X1.(m1_subset_1 X1 X0)\Rightarrow(v1_xreal_0 X1)) \quad (17)$$

Theorem 1

$$\forall X0.\forall X1.((v1_funct_1 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers))))\Rightarrow((v7_valued_0 (k2_partfun1 k1_numbers k1_numbers X1 X0))\Rightarrow(v8_valued_0 (k2_partfun1 k1_numbers k1_numbers (k32_valued_1 k1_numbers k1_numbers X1) X0)))$$