

t24_rfunct_2

(TMbkn9wyHgYPS9aJzk3Eh3e56jh9941eCj6)

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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 $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow ((v7_valued_0 (k2_partfun1 \\ & k1_numbers k1_numbers X1 X0)) \Leftrightarrow (\forall X2. (m1_subset_1 X2 k1_numbers) \Rightarrow \\ & (\forall X3. (m1_subset_1 X3 k1_numbers) \Rightarrow (((X2 \in k9_subset_1 k1_numbers \\ & X0 (k1_relset_1 k1_numbers X1)) \wedge (X3 \in k9_subset_1 k1_numbers X0 \\ & (k1_relset_1 k1_numbers X1))) \Rightarrow ((r1_xxreal_0 X3 X2) \vee (r1_xxreal_0 \\ & (k1_seq_1 X1 X2) (k1_seq_1 X1 X3)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. (v1_xxreal_0 X0) \Rightarrow (\forall X1. (v1_xxreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X0)) \Rightarrow (X0 = X1)) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1_funct_1 X2) \wedge \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \Rightarrow (k2_partfun1 \\ & X0 X1 X2 X3 = k5_relat_1 X2 X3) \end{aligned} \tag{3}$$

Assume the following.

$$v3_membered k1_numbers \tag{4}$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v3_valued_0 X0))) \Rightarrow (m1_subset_1 (k1_seq_1 X0 X1) k1_numbers) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0)\wedge(v1_xxreal_0 X1))\Rightarrow((r1_xxreal_0 X0 X1)\vee(r1_xxreal_0 X1 X0)) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(v1_xxreal_0 X0) \quad (7)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(v1_xreal_0 X0) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(v3_membered X1)\Rightarrow(\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v3_valued_0 X2)) \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.((v1_funct_1 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k1_numbers k1_numbers))))\Rightarrow((v7_valued_0 (k2_partfun1 \\ & k1_numbers k1_numbers X1 X0))\Leftrightarrow(\forall X2.(m1_subset_1 X2 k1_numbers)\Rightarrow \\ & (\forall X3.(m1_subset_1 X3 k1_numbers)\Rightarrow(((X2 \in k9_subset_1 k1_numbers \\ & X0 (k1_relset_1 k1_numbers X1))\wedge((X3 \in k9_subset_1 k1_numbers \\ & X0 (k1_relset_1 k1_numbers X1))\wedge(r1_xxreal_0 X2 X3))\Rightarrow(r1_xxreal_0 \\ & (k1_seq_1 X1 X2) (k1_seq_1 X1 X3)))))) \end{aligned}$$