

t54_rfunct_3

(TMcbsYsEomoXUwF5Y8811wiLAhoUwXgiXra)

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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 $r2_rfunct_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ 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 $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $k7_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1_tarski X0 X1) \wedge (r1_tarski X1 X2)) \Rightarrow (r1_tarski X0 X2) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ k1_numbers k1_numbers)))) \Rightarrow (\forall X1. (r2_rfunct_3 X0 X1) \Leftrightarrow (\\ (r1_tarski X1 (k1_relset_1 k1_numbers X0)) \wedge (\forall X2. (m1_subset_1 \\ X2 k1_numbers) \Rightarrow (((r1_xxreal_0 k6_numbers X2) \wedge (r1_xxreal_0 X2 \\ np_1)) \Rightarrow (\forall X3. (m1_subset_1 X3 k1_numbers) \Rightarrow (\forall X4. \\ (m1_subset_1 X4 k1_numbers) \Rightarrow (((X3 \in X1) \wedge ((X4 \in X1) \wedge (k7_real_1 \\ (k8_real_1 X2 X3) (k8_real_1 (k9_real_1 np_1 X2) X4) \in X1)))) \Rightarrow (r1_xxreal_0 \\ (k1_seq_1 X0 (k7_real_1 (k8_real_1 X2 X3) (k8_real_1 (k9_real_1 \\ np_1 X2) X4))) (k7_real_1 (k8_real_1 X2 (k1_seq_1 X0 X3)) (k8_real_1 \\ (k9_real_1 np_1 X2) (k1_seq_1 X0 X4)))))))))) \quad (3) \end{aligned}$$

Theorem 1

$$\forall X0. ((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ k1_numbers k1_numbers)))) \Rightarrow (\forall X1. \forall X2. ((r2_rfunct_3 \\ X0 X1) \wedge (r1_tarski X2 X1)) \Rightarrow (r2_rfunct_3 X0 X2))$$