

t1_seq_4

(TMKy8ompCUHns77w2ro39mEbjfg1mF3rvGt)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 k1_numbers)) \Rightarrow (\neg(\forall X2.(v1_xreal_0 \\ & X2) \Rightarrow (\forall X3.(v1_xreal_0 X3) \Rightarrow (((X2 \in X0) \wedge (X3 \in X1)) \Rightarrow (r1_xxreal_0 \\ & X2 X3)))))) \wedge (\forall X2.(v1_xreal_0 X2) \Rightarrow (\exists X3.(v1_xreal_0 \\ & X3) \wedge (\exists X4.(v1_xreal_0 X4) \wedge ((X3 \in X0) \wedge ((X4 \in X1) \wedge (\neg(r1_xxreal_0 \\ & X3 X2) \wedge (r1_xxreal_0 X2 X4)))))))))) \end{aligned} \tag{1}$$

Assume the following.

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

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 k1_numbers)) \Rightarrow (\neg(\forall X2.(v1_xreal_0 \\ & X2) \Rightarrow (\forall X3.(v1_xreal_0 X3) \Rightarrow (\neg(X2 \in X0) \wedge ((X3 \in X1) \wedge (r1_xxreal_0 \\ & X3 X2)))))) \wedge (\forall X2.(v1_xreal_0 X2) \Rightarrow (\exists X3.(v1_xreal_0 \\ & X3) \wedge (\exists X4.(v1_xreal_0 X4) \wedge ((X3 \in X0) \wedge ((X4 \in X1) \wedge (\neg(r1_xxreal_0 \\ & X3 X2) \wedge (r1_xxreal_0 X2 X4)))))))))) \end{aligned}$$