

t44_fdifff_2

(TMQZQyXH7QYJtadspxDRmHY9Y7b8z258vcq)

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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 $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_subset_1 : \iota \Rightarrow \iota$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_fdiff_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_fdiff_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v3_rcomp_1 : \iota \Rightarrow o$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v6_valued_0 : \iota \Rightarrow o$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_funct_1 : \iota \Rightarrow o$ be given. Let $v5_valued_0 : \iota \Rightarrow o$ be given. Let $v1_fcont_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\
 & \quad k1_numbers k1_numbers)))) \Rightarrow (((r1_tarski (k2_subset_1 k1_numbers) \\
 & (k1_relset_1 k1_numbers X0)) \wedge ((r2_fdiff_1 X0 (k2_subset_1 k1_numbers)) \wedge \\
 & \quad (\forall X1. (m1_subset_1 X1 k1_numbers) \Rightarrow (\neg r1_xxreal_0 k6_numbers \\
 & \quad (k1_fdiff_1 X0 X1)))))) \Rightarrow ((v6_valued_0 (k2_partfun1 k1_numbers \\
 & \quad k1_numbers X0 (k2_subset_1 k1_numbers))) \wedge (v2_funct_1 X0))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. ((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\
 & \quad k1_numbers k1_numbers)))) \Rightarrow (((r1_tarski (k2_subset_1 k1_numbers) \\
 & (k1_relset_1 k1_numbers X0)) \wedge ((r2_fdiff_1 X0 (k2_subset_1 k1_numbers)) \wedge \\
 & \quad (\forall X1. (m1_subset_1 X1 k1_numbers) \Rightarrow (\neg r1_xxreal_0 (k1_fdiff_1 \\
 & \quad X0 X1) k6_numbers)))) \Rightarrow ((v5_valued_0 (k2_partfun1 k1_numbers \\
 & \quad k1_numbers X0 (k2_subset_1 k1_numbers))) \wedge (v2_funct_1 X0))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k1_numbers k1_numbers)))) \Rightarrow (((r1_tarski (k2_subset_1 k1_numbers) \\
& (k1_relset_1 k1_numbers X0)) \wedge (v1_fcont_1 (k2_partfun1 k1_numbers \\
& k1_numbers X0 (k2_subset_1 k1_numbers)))) \Rightarrow (((\neg v5_valued_0 (\\
& k2_partfun1 k1_numbers k1_numbers X0 (k2_subset_1 k1_numbers))) \wedge \\
& (\neg v6_valued_0 (k2_partfun1 k1_numbers k1_numbers X0 (k2_subset_1 \\
& k1_numbers)))) \vee (v3_rcomp_1 (k2_relset_1 k1_numbers X0))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow ((r2_fdiff_1 X1 X0) \Rightarrow \\
& (v1_fcont_1 (k2_partfun1 k1_numbers k1_numbers X1 X0)))
\end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned}
& \forall X0. ((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k1_numbers k1_numbers)))) \Rightarrow (((r1_tarski (k2_subset_1 k1_numbers) \\
& (k1_relset_1 k1_numbers X0)) \wedge (r2_fdiff_1 X0 (k2_subset_1 k1_numbers))) \Rightarrow \\
& (((\exists X1. (m1_subset_1 X1 k1_numbers) \wedge (r1_xxreal_0 (k1_fdiff_1 \\
& X0 X1) k6_numbers)) \wedge (\exists X1. (m1_subset_1 X1 k1_numbers) \wedge \\
& (r1_xxreal_0 k6_numbers (k1_fdiff_1 X0 X1)))) \vee (v3_rcomp_1 (k2_relset_1 \\
& k1_numbers X0))))
\end{aligned}$$