

t42_fdifff_2

(TMFbX9NVZD3ctatNyM4radvwJ88R8fgjSZ7)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_prob_1 : \iota \Rightarrow \iota$ 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 $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v6_valued_0 : \iota \Rightarrow o$ 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.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.((v1_funct_1 \\ & X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow \\ & (((r1_tarski (k10_prob_1 X0) (k1_relset_1 k1_numbers X1)) \wedge ((\\ & r2_fdiff_1 X1 (k10_prob_1 X0)) \wedge (\forall X2.(m1_subset_1 X2 k1_numbers) \Rightarrow \\ & (\neg(X2 \in k10_prob_1 X0) \wedge (r1_xxreal_0 k6_numbers (k1_fdiff_1 X1 \\ & X2)))))) \Rightarrow ((v6_valued_0 (k2_partfun1 k1_numbers k1_numbers X1 \\ & (k10_prob_1 X0))) \wedge (v2_funct_1 (k2_partfun1 k1_numbers k1_numbers \\ & X1 (k10_prob_1 X0)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.((v1_funct_1 \\ & X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow \\ & (((r1_tarski (k10_prob_1 X0) (k1_relset_1 k1_numbers X1)) \wedge ((\\ & r2_fdiff_1 X1 (k10_prob_1 X0)) \wedge (\forall X2.(m1_subset_1 X2 k1_numbers) \Rightarrow \\ & (\neg(X2 \in k10_prob_1 X0) \wedge (r1_xxreal_0 (k1_fdiff_1 X1 X2) k6_numbers)))))) \Rightarrow \\ & ((v5_valued_0 (k2_partfun1 k1_numbers k1_numbers X1 (k10_prob_1 \\ & X0))) \wedge (v2_funct_1 (k2_partfun1 k1_numbers k1_numbers X1 (k10_prob_1 \\ & X0)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow ((r2_fdiff_1 X1 X0) \Rightarrow \\ & (v1_fcont_1 (k2_partfun1 k1_numbers k1_numbers X1 X0))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.((v1_funct_1 \\
& X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow \\
& (((r1_tarski (k10_prob_1 X0) (k1_relset_1 k1_numbers X1)) \wedge (v1_fcont_1 \\
& (k2_partfun1 k1_numbers k1_numbers X1 (k10_prob_1 X0)))) \Rightarrow (((\\
& \neg v5_valued_0 (k2_partfun1 k1_numbers k1_numbers X1 (k10_prob_1 \\
& X0))) \wedge (\neg v6_valued_0 (k2_partfun1 k1_numbers k1_numbers X1 (k10_prob_1 \\
& X0)))) \vee (v3_rcomp_1 (k2_relset_1 k1_numbers (k2_partfun1 k1_numbers \\
& k1_numbers X1 (k10_prob_1 X0))))))
\end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.((v1_funct_1 \\
& X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow \\
& (((r1_tarski (k10_prob_1 X0) (k1_relset_1 k1_numbers X1)) \wedge (r2_fdiff_1 \\
& X1 (k10_prob_1 X0))) \Rightarrow (((\exists X2.(m1_subset_1 X2 k1_numbers) \wedge \\
& ((X2 \in k10_prob_1 X0) \wedge (r1_xxreal_0 (k1_fdiff_1 X1 X2) k6_numbers))) \wedge \\
& (\exists X2.(m1_subset_1 X2 k1_numbers) \wedge ((X2 \in k10_prob_1 X0) \wedge \\
& (r1_xxreal_0 k6_numbers (k1_fdiff_1 X1 X2)))))) \vee (v3_rcomp_1 (\\
& k2_relset_1 k1_numbers (k2_partfun1 k1_numbers k1_numbers X1 \\
& (k10_prob_1 X0))))))
\end{aligned}$$