

t25_fdifff_2 (TMNgQCnuQpd- CpQ81EBNLFrj4KjMU3S24umz)

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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 $k2_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k18_complex1 : \iota \Rightarrow \iota$ be given. Let $k9_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_square_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ 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 $v3_funct_1 : \iota \Rightarrow o$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k4_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 k1_numbers) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge (m1_subset_1 X2 \\ & (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow (((r1_tarski \\ & (k2_rcomp_1 X0 X1) (k1_relset_1 k1_numbers X2)) \wedge ((r2_fdiff_1 \\ & X2 (k2_rcomp_1 X0 X1)) \wedge (\forall X3.(m1_subset_1 X3 k1_numbers) \Rightarrow \\ & ((X3 \in k2_rcomp_1 X0 X1) \Rightarrow (k1_fdiff_1 X2 X3 = k6_numbers)))))) \Rightarrow (v3_funct_1 \\ & (k2_partfun1 k1_numbers k1_numbers X2 (k2_rcomp_1 X0 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v3_rcomp_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers))) \Rightarrow \\ & (\forall X1.((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k1_numbers k1_numbers)))) \Rightarrow (((r1_tarski X0 (k1_relset_1 k1_numbers \\ & X1)) \wedge (\forall X2.(m1_subset_1 X2 k1_numbers) \Rightarrow (\forall X3.(m1_subset_1 \\ & X3 k1_numbers) \Rightarrow (((X2 \in X0) \wedge (X3 \in X0)) \Rightarrow (r1_xxreal_0 (k18_complex1 \\ & (k9_real_1 (k1_seq_1 X1 X2) (k1_seq_1 X1 X3))) (k5_square_1 (k9_real_1 \\ & X2 X3)))))) \Rightarrow ((r2_fdiff_1 X1 X0) \wedge (\forall X2.(m1_subset_1 X2 \\ & k1_numbers) \Rightarrow ((X2 \in X0) \Rightarrow (k1_fdiff_1 X1 X2 = k6_numbers)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow (k2_rcomp_1 X0 X1 = k4_xxreal_1 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0)\wedge(v1_xreal_0 X1))\Rightarrow(v3_rcomp_1 (k4_xxreal_1 X0 X1)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0)\wedge(v1_xxreal_0 X1))\Rightarrow(m1_subset_1 (k2_rcomp_1 X0 X1) (k1_zfmisc_1 k1_numbers)) \quad (5)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(v1_xxreal_0 X0) \quad (6)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(v1_xreal_0 X0) \quad (7)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(\forall X1.(m1_subset_1 \\ & X1 k1_numbers)\Rightarrow(\forall X2.((v1_funct_1 X2)\wedge(m1_subset_1 X2 \\ & (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers))))\Rightarrow((\forall X3. \\ & (m1_subset_1 X3 k1_numbers)\Rightarrow(\forall X4.(m1_subset_1 X4 k1_numbers)\Rightarrow \\ & (((X3 \in k2_rcomp_1 X0 X1)\wedge(X4 \in k2_rcomp_1 X0 X1))\Rightarrow(r1_xxreal_0 \\ & (k18_complex1 (k9_real_1 (k1_seq_1 X2 X3) (k1_seq_1 X2 X4))) (k5_square_1 \\ & (k9_real_1 X3 X4))))))\wedge(r1_tarski (k2_rcomp_1 X0 X1) (k1_relset_1 \\ & k1_numbers X2)))\Rightarrow((r2_fdiff_1 X2 (k2_rcomp_1 X0 X1))\wedge(v3_funct_1 \\ & (k2_partfun1 k1_numbers k1_numbers X2 (k2_rcomp_1 X0 X1)))))) \end{aligned}$$