

t30_cfdiff_1

(TMKJDvY9LYNWpgyDesyacAmgxg21nywJBY2)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ 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 $v6_cfdiff_1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k25_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_cfdiff_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_cfdiff_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_cfdiff_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_cfdiff_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (m1_subset_1 X0 k2_numbers) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k2_numbers k2_numbers)))) \Rightarrow \\ (\forall X2. (m1_subset_1 X2 k2_numbers) \Rightarrow ((r1_cfdiff_1 X1 X2) \Rightarrow \\ ((r1_cfdiff_1 (k25_valued_1 k2_numbers k2_numbers X1 X0) X2) \wedge \\ (k2_cfdiff_1 (k25_valued_1 k2_numbers k2_numbers X1 X0) X2 = k9_complex1 X0 (k2_cfdiff_1 X1 X2)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k2_numbers k2_numbers)))) \Rightarrow (\forall X1. ((v6_cfdiff_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 k2_numbers))) \Rightarrow ((r2_cfdiff_1 X0 X1) \Leftrightarrow ((r1_tarski X1 (k1_relset_1 k2_numbers X0)) \wedge (\forall X2. (m1_subset_1 X2 k2_numbers) \Rightarrow ((X2 \in X1) \Rightarrow (r1_cfdiff_1 X0 X2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$v1_membered k2_numbers \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k2_numbers k2_numbers)))) \Rightarrow ((v1_funct_1 (k3_cfdiff_1 \\ & X0 X1)) \wedge (m1_subset_1 (k3_cfdiff_1 X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 \\ & k2_numbers k2_numbers)))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1_membered X1) \wedge \\ & (((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X1)))) \wedge (v1_xcmplx_0 X3))) \Rightarrow ((v1_funct_1 (k25_valued_1 X0 X1 \\ & X2 X3)) \wedge (m1_subset_1 (k25_valued_1 X0 X1 X2 X3) (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 k2_numbers)))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k2_numbers k2_numbers)))) \Rightarrow (\forall X1. (r2_cfdiff_1 X0 X1) \Rightarrow (\\ & \forall X2. ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k2_numbers k2_numbers)))) \Rightarrow ((X2 = k3_cfdiff_1 X0 X1) \Leftrightarrow ((k1_relset_1 \\ & k2_numbers X2 = X1) \wedge (\forall X3. (m1_subset_1 X3 k2_numbers) \Rightarrow (\\ & (X3 \in X1) \Rightarrow (k7_partfun1 k2_numbers X2 X3 = k2_cfdiff_1 X0 X3)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0. (v1_membered X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow (v1_xcmplx_0 X1)) \quad (8)$$

Theorem 1

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 k2_numbers) \Rightarrow (\forall X1. ((v1_funct_1 \\ & X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k2_numbers k2_numbers)))) \Rightarrow \\ & (\forall X2. ((v6_cfdiff_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 k2_numbers))) \Rightarrow \\ & (((r1_tarski X2 (k1_relset_1 k2_numbers (k25_valued_1 k2_numbers \\ & k2_numbers X1 X0))) \wedge (r2_cfdiff_1 X1 X2)) \Rightarrow ((r2_cfdiff_1 (k25_valued_1 \\ & k2_numbers k2_numbers X1 X0) X2) \wedge (\forall X3. (m1_subset_1 X3 k2_numbers) \Rightarrow \\ & ((X3 \in X2) \Rightarrow (k7_partfun1 k2_numbers (k3_cfdiff_1 (k25_valued_1 \\ & k2_numbers k2_numbers X1 X0) X2) X3 = k9_complex1 X0 (k2_cfdiff_1 \\ & X1 X3)))))) \end{aligned}$$