

t7_integra7 (TMTPKKBKixMY- gAf1Ygv5FA4J3mVx6FUZAm4x)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. 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 $r2_fdiff_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k26_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_rcomp_1 : \iota \Rightarrow o$ be given. Let $r2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_fdiff_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow ((r2_fdiff_1 X1 X0) \Rightarrow (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1. ((v3_rcomp_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 k1_numbers)))) \Rightarrow (\forall X2. \\ & ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow ((r2_fdiff_1 X2 X1) \Rightarrow ((r2_fdiff_1 (k26_valued_1 k1_numbers k1_numbers X2 X0) X1) \wedge (r2_relset_1 k1_numbers k1_numbers (k2_fdiff_1 (k26_valued_1 k1_numbers k1_numbers X2 X0) X1) (k26_valued_1 k1_numbers k1_numbers (k2_fdiff_1 X2 X1) X0)))))) \quad (3) \end{aligned}$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow ((r2_fdiff_1 X1 X0) \Rightarrow (v3_rcomp_1 X0))) \quad (4)$$

Assume the following.

$$\forall X0. (v1_xreal_0 X0) \Leftrightarrow (X0 \in k1_numbers) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.\forall X2.((v1_funct_1 \\ & X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow \\ & ((r2_fdiff_1 X2 X1) \Rightarrow (r2_fdiff_1 (k26_valued_1 k1_numbers k1_numbers \\ & X2 X0) X1))) \end{aligned}$$