

t34_altcat_4

(TMQVhtFh4YCpn7Q6QyZQZ8G2iL5nm1RTtR4)

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Let $l2_altcat_1 : \iota \Rightarrow o$ be given. Let $m1_altcat_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u1_altcat_1 : \iota \Rightarrow \iota$ be given. Let $v2_altcat_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1_altcat_1 : \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_realset1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v4_relat_1 X1 X0)) \Rightarrow (k5_relat_1 X1 X0 = X1) \quad (1)$$

Assume the following.

$$\forall X0. (l1_altcat_1 X0) \Rightarrow ((v1_relat_1 (u1_altcat_1 X0)) \wedge ((v4_relat_1 (u1_altcat_1 X0) (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0))) \wedge ((v1_funct_1 (u1_altcat_1 X0)) \wedge (v1_partfun1 (u1_altcat_1 X0) (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))))) \quad (2)$$

Assume the following.

$$\forall X0. (l2_altcat_1 X0) \Rightarrow (l1_altcat_1 X0) \quad (3)$$

Assume the following.

$$\forall X0. (v1_relat_1 X0) \Rightarrow (\forall X1. k1_realset1 X0 X1 = k5_relat_1 X0 (k2_zfmisc_1 X1 X1)) \quad (4)$$

Assume the following.

$$\forall X0. (l2_altcat_1 X0) \Rightarrow (\forall X1. (m1_altcat_2 X1 X0) \Rightarrow ((v2_altcat_2 X1 X0) \Leftrightarrow (u1_altcat_1 X1 = k1_realset1 (u1_altcat_1 X0) (u1_struct_0 X1)))) \quad (5)$$

Theorem 1

$$\forall X0. (l2_altcat_1 X0) \Rightarrow (\forall X1. (m1_altcat_2 X1 X0) \Rightarrow (((u1_struct_0 X0 = u1_struct_0 X1) \wedge (u1_altcat_1 X0 = u1_altcat_1 X1)) \Rightarrow (v2_altcat_2 X1 X0)))$$