# t3_transgeo (TM-bZxxq4PDJcsWxt5JzHoZ3UMKWxqoKgZ1K)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ X0) \Rightarrow (\forall X3.((v1\_funct\_1\ X3) \wedge ((v1\_funct\_2\ X3\ X0\ X0) \wedge ((v3\_funct\_2\ X3\ X0\ X0) \wedge (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)))))) \Rightarrow ((k3\_funct\_2\ X0\ X0\ X3\ X1 = X2) \Leftrightarrow (k3\_funct\_2\ X0\ X0\ (k2\_funct\_2\ X0\ X3)\ X2 = X1))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((\neg v1\_xboole\_0\ X0) \wedge (((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ X0\ X1) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))) \wedge (m1\_subset\_1\ X3\ X0))) \Rightarrow (m1\_subset\_1\ (k3\_funct\_2\ X0\ X1\ X2\ X3)\ X1) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ X0\ X0) \wedge ((v3\_funct\_2\ X1\ X0\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)))))) \Rightarrow ((v1\_funct\_1\ (k2\_funct\_2\ X0\ X1)) \wedge ((v1\_funct\_2\ (k2\_funct\_2\ X0\ X1)\ X0\ X0) \wedge ((v3\_funct\_2\ (k2\_funct\_2\ X0\ X1)\ X0\ X0) \wedge (m1\_subset\_1\ (k2\_funct\_2\ X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0))))))) \tag{3}$$

**Theorem 1**

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (\forall X2.((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ X0\ X0) \wedge ((v3\_funct\_2\ X2\ X0\ X0) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)))))) \Rightarrow ((k3\_funct\_2\ X0\ X0\ X2\ (k3\_funct\_2\ X0\ X0\ (k2\_funct\_2\ X0\ X2)\ X1) = X1) \wedge (k3\_funct\_2\ X0\ X0\ (k2\_funct\_2\ X0\ X2)\ (k3\_funct\_2\ X0\ X0\ X2\ X1) = X1))))$$