

# t24\_transgeo

## (TMVerfeQRgR6qid4BmdYPe6rx1xJ8r54wxZ)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v1\_transgeo : \iota \Rightarrow o$  be given. Let  $l1\_analoaf : \iota \Rightarrow o$  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  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $v3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  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  $r3\_transgeo : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $r3\_relat\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_transgeo : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_analoaf : \iota \Rightarrow \iota$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. ((v1\_funct\_1 X1) \wedge ( \\ (v1\_funct\_2 X1 X0 X0) \wedge ((v3\_funct\_2 X1 X0 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (k2\_zfmisc\_1 X0 X0)))))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ (k2\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0) (k2\_zfmisc\_1 X0 X0)))) \Rightarrow (((r3\_relat\_2 \\ X2 (k2\_zfmisc\_1 X0 X0)) \wedge (r1\_transgeo X0 X1 X2)) \Rightarrow (r1\_transgeo X0 \\ (k2\_funct\_2 X0 X1) X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v1\_transgeo X0) \wedge (l1\_analoaf X0))) \Rightarrow (r3\_relat\_2 (u1\_analoaf X0) (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0))) \tag{2}$$

Assume the following.

$$\forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow (\neg v1\_xboole\_0 (u1\_struct\_0 X0)) \tag{3}$$

Assume the following.

$$\forall X0. (l1\_analoaf X0) \Rightarrow (m1\_subset\_1 (u1\_analoaf X0) (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0)) (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0)))))) \tag{4}$$

Assume the following.

$$\forall X0. (l1\_analoaf X0) \Rightarrow (l1\_struct\_0 X0) \tag{5}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1\_funct\_1 X1) \wedge ((v1\_funct\_2 X1 X0 X0) \wedge \\ & ((v3\_funct\_2 X1 X0 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & X0 X0)))))) \Rightarrow ((v1\_funct\_1 (k2\_funct\_2 X0 X1)) \wedge ((v1\_funct\_2 (k2\_funct\_2 \\ & X0 X1) X0 X0) \wedge ((v3\_funct\_2 (k2\_funct\_2 X0 X1) X0 X0) \wedge (m1\_subset\_1 \\ & (k2\_funct\_2 X0 X1) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_analoaf X0)) \Rightarrow (\forall X1. \\ & ((v1\_funct\_1 X1) \wedge ((v1\_funct\_2 X1 (u1\_struct\_0 X0) (u1\_struct\_0 \\ & X0)) \wedge ((v3\_funct\_2 X1 (u1\_struct\_0 X0) (u1\_struct\_0 X0)) \wedge (m1\_subset\_1 \\ & X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0)))))) \Rightarrow \\ & ((r3\_transgeo X0 X1) \Leftrightarrow (r1\_transgeo (u1\_struct\_0 X0) X1 (u1\_analoaf \\ & X0)))) \end{aligned} \quad (7)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v1\_transgeo X0) \wedge (l1\_analoaf \\ & X0))) \Rightarrow (\forall X1. ((v1\_funct\_1 X1) \wedge ((v1\_funct\_2 X1 (u1\_struct\_0 \\ & X0) (u1\_struct\_0 X0)) \wedge ((v3\_funct\_2 X1 (u1\_struct\_0 X0) (u1\_struct\_0 \\ & X0)) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 \\ & X0) (u1\_struct\_0 X0)))))) \Rightarrow ((r3\_transgeo X0 X1) \Rightarrow (r3\_transgeo \\ & X0 (k2\_funct\_2 (u1\_struct\_0 X0) X1)))) \end{aligned}$$