

t11\_conlat\_1  
(TMMF86Agd7gK2vFxbGsUL1GhyFNazEwtyjm)

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Let  $v1\_conlat\_1 : \iota \Rightarrow o$  be given. Let  $l1\_conlat\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $u4\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_setfam\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_conlat\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_conlat\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k8\_mcart\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_conlat\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v1\_conlat\_1 X0) \wedge (l1\_conlat\_1 X0)) \Rightarrow (\forall X1. \\
& (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X2. \\
& (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u4\_struct\_0 X0))) \Rightarrow ((r1\_tarski \\
& X1 (k3\_funct\_2 (k1\_zfmisc\_1 (u4\_struct\_0 X0)) (k9\_setfam\_1 (u1\_struct\_0 \\
& X0)) (k2\_conlat\_1 X0) X2)) \Leftrightarrow (r1\_relset\_1 (u1\_struct\_0 X0) (u4\_struct\_0 \\
& X0) (k8\_mcart\_1 (u1\_struct\_0 X0) (u4\_struct\_0 X0) X1 X2) (u1\_conlat\_1 \\
& X0))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v1\_conlat\_1 X0) \wedge (l1\_conlat\_1 X0)) \Rightarrow (\forall X1. \\
& (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X2. \\
& (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u4\_struct\_0 X0))) \Rightarrow ((r1\_tarski \\
& X2 (k3\_funct\_2 (k1\_zfmisc\_1 (u1\_struct\_0 X0)) (k9\_setfam\_1 (u4\_struct\_0 \\
& X0)) (k1\_conlat\_1 X0) X1)) \Leftrightarrow (r1\_relset\_1 (u1\_struct\_0 X0) (u4\_struct\_0 \\
& X0) (k8\_mcart\_1 (u1\_struct\_0 X0) (u4\_struct\_0 X0) X1 X2) (u1\_conlat\_1 \\
& X0))))))
\end{aligned} \tag{2}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v1\_conlat\_1 X0) \wedge (l1\_conlat\_1 X0)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u4\_struct\_0 X0))) \Rightarrow ((r1\_tarski \\ X1 (k3\_funct\_2 (k1\_zfmisc\_1 (u4\_struct\_0 X0)) (k9\_setfam\_1 (u1\_struct\_0 \\ X0)) (k2\_conlat\_1 X0) X2)) \Leftrightarrow (r1\_tarski X2 (k3\_funct\_2 (k1\_zfmisc\_1 \\ (u1\_struct\_0 X0)) (k9\_setfam\_1 (u4\_struct\_0 X0)) (k1\_conlat\_1 \\ X0) X1)))))) \end{aligned}$$