

## t31\_toler\_1

(TMYkvWSKewJ2qr7gVLaVL3RYvrseXFLjn3Y)

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Let  $v1\_relat\_2 : \iota \Rightarrow o$  be given. Let  $v3\_relat\_2 : \iota \Rightarrow o$  be given. Let  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  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  $k4\_toler\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_toler\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_toler\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0. \forall X1. ((v1\_relat\_2 X1) \wedge ((v3\_relat\_2 X1) \wedge ((v1\_partfun1 \\
 & X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0)))))) \Rightarrow \\
 & (\forall X2. ((v1\_relat\_2 X2) \wedge ((v3\_relat\_2 X2) \wedge ((v1\_partfun1 \\
 & X2 X0) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0)))))) \Rightarrow \\
 & ((\forall X3. ((v1\_toler\_1 X3 X0 X1) \wedge (m1\_toler\_1 X3 X0 X1)) \Leftrightarrow ((v1\_toler\_1 \\
 & X3 X0 X2) \wedge (m1\_toler\_1 X3 X0 X2)))) \Rightarrow (r2\_relset\_1 X0 X0 X1 X2))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. \forall X1. ((v1\_relat\_2 X1) \wedge ((v3\_relat\_2 X1) \wedge ((v1\_partfun1 \\
 & X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0)))))) \Rightarrow \\
 & (\forall X2. (X2 = k4\_toler\_1 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((v1\_toler\_1 \\
 & X3 X0 X1) \wedge (m1\_toler\_1 X3 X0 X1))))
 \end{aligned} \tag{2}$$

### Theorem 1

$$\begin{aligned}
 & \forall X0. \forall X1. ((v1\_relat\_2 X1) \wedge ((v3\_relat\_2 X1) \wedge ((v1\_partfun1 \\
 & X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0)))))) \Rightarrow \\
 & (\forall X2. ((v1\_relat\_2 X2) \wedge ((v3\_relat\_2 X2) \wedge ((v1\_partfun1 \\
 & X2 X0) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0)))))) \Rightarrow \\
 & ((k4\_toler\_1 X0 X1 = k4\_toler\_1 X0 X2) \Rightarrow (r2\_relset\_1 X0 X0 X1 X2))
 \end{aligned}$$