

## t13\_jct\_misc

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October 27, 2020

Let  $v4\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k15\_euclid : \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  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  $v9\_rltopsp1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_rcomp\_1 : \iota \Rightarrow o$  be given. Let  $k7\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_pscomp\_1 : \iota$  be given. Let  $k6\_measure6 : \iota \Rightarrow \iota$  be given. Let  $k2\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $l1\_rltopsp1 : \iota \Rightarrow o$  be given. Let  $l1\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v5\_rltopsp1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid \\ np\_2)))) \Rightarrow ((v9\_rltopsp1 X0 (k15\_euclid np\_2)) \Rightarrow (k6\_measure6 \\ (k7\_relset\_1 (u1\_struct\_0 (k15\_euclid np\_2)) k1\_numbers k5\_pscomp\_1 \\ X0) = k7\_relset\_1 (u1\_struct\_0 (k15\_euclid np\_2)) k1\_numbers \\ k5\_pscomp\_1 (k2\_pre\_topc (k15\_euclid np\_2) X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1\_pre\_topc X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (u1\_struct\_0 X0))) \Rightarrow (((v4\_pre\_topc X1 X0) \Rightarrow (k2\_pre\_topc X0 X1 = \\ X1)) \wedge (((v2\_pre\_topc X0) \wedge (k2\_pre\_topc X0 X1 = X1)) \Rightarrow (v4\_pre\_topc \\ X1 X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} ((v2\_xxreal\_0 np\_2) \wedge (m2\_subset\_1 np\_2 k1\_numbers k5\_numbers)) \wedge \\ ((m1\_subset\_1 np\_2 k5\_numbers) \wedge (m1\_subset\_1 np\_2 k1\_numbers)) \end{aligned} \quad (3)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (4)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_numbers))\Rightarrow(v2\_rcomp\_1 (k6\_measure6 X0)) \quad (5)$$

Assume the following.

$$\forall X0.(l1\_rltopsp1 X0)\Rightarrow((l1\_rlvect\_1 X0)\wedge(l1\_pre\_topc X0)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))\Rightarrow(m1\_subset\_1 (k7\_relset\_1 X0 X1 X2 X3) (k1\_zfmisc\_1 X1)) \quad (7)$$

Assume the following.

$$(v1\_funct\_1 k5\_pscomp\_1)\wedge((v1\_funct\_2 k5\_pscomp\_1 (u1\_struct\_0 (k15\_euclid np\_2)) k1\_numbers)\wedge(m1\_subset\_1 k5\_pscomp\_1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid np\_2)) k1\_numbers)))) \quad (8)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0)\Rightarrow((v5\_rltopsp1 (k15\_euclid X0))\wedge(l1\_rltopsp1 (k15\_euclid X0))) \quad (9)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k4\_ordinal1)\Rightarrow(v7\_ordinal1 X0) \quad (10)$$

**Theorem 1**

$$\forall X0.((v4\_pre\_topc X0 (k15\_euclid np\_2))\wedge(m1\_subset\_1 X0 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid np\_2)))))\Rightarrow((v9\_rltopsp1 X0 (k15\_euclid np\_2))\Rightarrow(v2\_rcomp\_1 (k7\_relset\_1 (u1\_struct\_0 (k15\_euclid np\_2)) k1\_numbers k5\_pscomp\_1 X0)))$$