

# t31\_incspl\_1 (TMVYRCYKwDKFnJepZQRSXsF- fzhTNtFUJLj)

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Let  $v15\_incsp\_1 : \iota \Rightarrow o$  be given. Let  $l2\_incsp\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_incsp\_1 : \iota \Rightarrow \iota$  be given. Let  $v3\_incsp\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k8\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_incsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $l1\_incsp\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. k1\_enumset1 X0 X1 X2 = k1\_enumset1 X1 X0 X2 \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v15\_incsp\_1 X0) \wedge (l2\_incsp\_1 X0)) \Rightarrow (\forall X1. ( \\ m1\_subset\_1 X1 (u1\_incsp\_1 X0)) \Rightarrow (\forall X2. (m1\_subset\_1 X2 ( \\ u1\_incsp\_1 X0)) \Rightarrow (\forall X3. (m1\_subset\_1 X3 (u1\_incsp\_1 X0)) \Rightarrow \\ ((\neg v3\_incsp\_1 (k8\_domain\_1 (u1\_incsp\_1 X0) X1 X2 X3) X0) \Rightarrow (k2\_incsp\_1 \\ X0 X1 X2 X3 = k2\_incsp\_1 X0 X2 X1 X3)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v15\_incsp\_1 X0) \wedge (l2\_incsp\_1 X0)) \Rightarrow (\forall X1. ( \\ m1\_subset\_1 X1 (u1\_incsp\_1 X0)) \Rightarrow (\forall X2. (m1\_subset\_1 X2 ( \\ u1\_incsp\_1 X0)) \Rightarrow (\forall X3. (m1\_subset\_1 X3 (u1\_incsp\_1 X0)) \Rightarrow \\ ((\neg v3\_incsp\_1 (k8\_domain\_1 (u1\_incsp\_1 X0) X1 X2 X3) X0) \Rightarrow (k2\_incsp\_1 \\ X0 X1 X2 X3 = k2\_incsp\_1 X0 X1 X3 X2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1\_xboole\_0 X0) \wedge \\ ((m1\_subset\_1 X1 X0) \wedge ((m1\_subset\_1 X2 X0) \wedge (m1\_subset\_1 X3 X0)))) \Rightarrow \\ (k8\_domain\_1 X0 X1 X2 X3 = k1\_enumset1 X1 X2 X3) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. (l1\_incsp\_1 X0) \Rightarrow (\neg v1\_xboole\_0 (u1\_incsp\_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0.(l2\_incsp\_1 X0) \Rightarrow (l1\_incsp\_1 X0) \quad (6)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v15\_incsp\_1 X0) \wedge (l2\_incsp\_1 X0)) \Rightarrow (\forall X1.( \\ & \quad m1\_subset\_1 X1 (u1\_incsp\_1 X0)) \Rightarrow (\forall X2.(m1\_subset\_1 X2 ( \\ & \quad u1\_incsp\_1 X0)) \Rightarrow (\forall X3.(m1\_subset\_1 X3 (u1\_incsp\_1 X0)) \Rightarrow \\ & ((\neg v3\_incsp\_1 (k8\_domain\_1 (u1\_incsp\_1 X0) X1 X2 X3) X0) \Rightarrow (k2\_incsp\_1 \\ & \quad X0 X1 X2 X3 = k2\_incsp\_1 X0 X2 X3 X1)))))) \end{aligned}$$