

t25\_normform  
(TMQ2MdaGrX79D7coyxbXfTDzRM5Ga6WrQEh)

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Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_finsub\_1 : \iota \Rightarrow \iota$  be given. Let  $k7\_normform : \iota \Rightarrow \iota$  be given. Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (m1\_subset\_1 X1 (k2\_zfmisc\_1 (k5\_finsub\_1 \\ X0) (k5\_finsub\_1 X0))) \Rightarrow ((X1 \in k7\_normform X0) \Leftrightarrow (r1\_xboole\_0 (k2\_domain\_1 \\ (k5\_finsub\_1 X0) (k5\_finsub\_1 X0) X1) (k3\_domain\_1 (k5\_finsub\_1 \\ X0) (k5\_finsub\_1 X0) X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge \\ (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2. (m2\_subset\_1 \\ X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \neg v1\_xboole\_0 (k7\_normform X0) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge \\ (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2. (m2\_subset\_1 \\ X2 X0 X1) \Rightarrow (m1\_subset\_1 X2 X0)) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. m1\_subset\_1 (k7\_normform X0) (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ (k5\_finsub\_1 X0) (k5\_finsub\_1 X0))) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0. k7\_normform\ X0 = ReplSep\ (toset\ (\lambda X1 : \iota.m1\_subset\_1 \\ X1\ (k2\_zfmisc\_1\ (k5\_finsub\_1\ X0)\ (k5\_finsub\_1\ X0))))\ (\lambda X1 : \\ \iota.r1\_xboole\_0\ (k2\_domain\_1\ (k5\_finsub\_1\ X0)\ (k5\_finsub\_1\ X0) \\ X1)\ (k3\_domain\_1\ (k5\_finsub\_1\ X0)\ (k5\_finsub\_1\ X0)\ X1))\ (\lambda X1 : \\ \iota.X1) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1\_xboole\_0\ X0) \Rightarrow ((m1\_subset\_1\ X1\ X0) \Leftrightarrow \\ (X1 \in X0))) \wedge ((v1\_xboole\_0\ X0) \Rightarrow ((m1\_subset\_1\ X1\ X0) \Leftrightarrow (v1\_xboole\_0 \\ X1))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0\ X0) \Rightarrow (\forall X1. (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \Rightarrow (v1\_xboole\_0\ X1)) \quad (8)$$

**Theorem 1**

$$\begin{aligned} \forall X0. \forall X1. (m2\_subset\_1\ X1\ (k2\_zfmisc\_1\ (k5\_finsub\_1 \\ X0)\ (k5\_finsub\_1\ X0))\ (k7\_normform\ X0)) \Rightarrow (r1\_xboole\_0\ (k2\_domain\_1 \\ (k5\_finsub\_1\ X0)\ (k5\_finsub\_1\ X0)\ X1)\ (k3\_domain\_1\ (k5\_finsub\_1 \\ X0)\ (k5\_finsub\_1\ X0)\ X1)) \end{aligned}$$