

t1\_random\_2 (TM-  
bgQvT2VA25uhTutK52p5oUWfadTHX5nC6)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v2\_funct\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v1\_relat\_1 X2) \wedge (v1\_funct\_1 X2)) \Rightarrow (((r1\_xboole\_0 X0 X1) \wedge (v2\_funct\_1 X2)) \Rightarrow (r1\_xboole\_0 (k7\_relat\_1 X2 X0) (k7\_relat\_1 X2 X1))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (v1\_relat\_1 X1) \Rightarrow (k10\_xtuple\_0 (k5\_relat\_1 X1 X0) = k7\_relat\_1 X1 X0) \quad (2)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v2\_funct\_1 X0))) \Rightarrow \\ & \quad (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k9\_xtuple\_0 X0))) \Rightarrow \\ & \quad (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k9\_xtuple\_0 X0))) \Rightarrow \\ & \quad ((r1\_xboole\_0 X1 X2) \Rightarrow (r1\_xboole\_0 (k10\_xtuple\_0 (k5\_relat\_1 X0 X1)) (k10\_xtuple\_0 (k5\_relat\_1 X0 X2)))))) \end{aligned}$$