

l10\_pnproc\_1 (TMSamXKQkry-  
wbf3JoSk5nKyT9N2zgYL7X6T)

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Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (\neg(\neg r1\_xboole\_0 X0 X1) \wedge (\forall X2. \neg(X2 \in X0) \wedge (X2 \in X1))) \wedge (\neg(\exists X2. (X2 \in X0) \wedge (X2 \in X1)) \wedge (r1\_xboole\_0 X0 X1)) \quad (1)$$

**Theorem 1**

$$\forall X0. \forall X1. (\forall X2. \neg(X2 \in X0) \wedge (X2 \in X1)) \Leftrightarrow (r1\_xboole\_0 X0 X1)$$