

# t2\_sysrel (TMbuGEkKaS- gCo9rT5cPd8CZ8z9KBhn2WoDZ)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((r1\_tarski X0 X1) \wedge \\ & ((r1\_tarski X2 X3) \wedge (r1\_xboole\_0 X1 X3))) \Rightarrow (r1\_xboole\_0 X0 X2) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (v1\_relat\_1 X2) \Rightarrow ((r1\_tarski \\ & (k9\_xtuple\_0 (k3\_xboole\_0 X2 (k2\_zfmisc\_1 X0 X1))) X0) \wedge (r1\_tarski \\ & (k10\_xtuple\_0 (k3\_xboole\_0 X2 (k2\_zfmisc\_1 X0 X1))) X1)) \end{aligned} \quad (2)$$

## Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (v1\_relat\_1 X2) \Rightarrow ((r1\_xboole\_0 \\ & X0 X1) \Rightarrow (r1\_xboole\_0 (k9\_xtuple\_0 (k3\_xboole\_0 X2 (k2\_zfmisc\_1 \\ & X0 X1))) (k10\_xtuple\_0 (k3\_xboole\_0 X2 (k2\_zfmisc\_1 X0 X1)))))) \end{aligned}$$