

t3\_sysrel  
(TMbcxX9etXGj7xqVtP4B3xodzWtF3maR4pD)

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

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Rightarrow (k3\_xboole\_0 X0 X1 = X0) \quad (1)$$

Assume the following.

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

**Theorem 1**

$$\forall X0. \forall X1. \forall X2. (v1\_relat\_1 X2) \Rightarrow ((r1\_tarski X2 (k2\_zfmisc\_1 X0 X1)) \Rightarrow ((r1\_tarski (k9\_xtuple\_0 X2) X0) \wedge (r1\_tarski (k10\_xtuple\_0 X2) X1)))$$