

t15\_sysrel  
(TMVtxmL55yg8kvgi1D88odY9ZF1i1YvpdvV)

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Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_relat\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (v1\_relat\_1 X1) \Rightarrow (r1\_tarski (k5\_relat\_1 X1 X0) X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Rightarrow (k4\_relat\_1 X0 = k5\_relat\_1 (k4\_relat\_1 X1) X0) \quad (2)$$

Assume the following.

$$\forall X0. v1\_relat\_1 (k4\_relat\_1 X0) \quad (3)$$

**Theorem 1**

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Rightarrow (r1\_tarski (k4\_relat\_1 X0) (k4\_relat\_1 X1))$$