

# t115\_relat\_1 (TMFKFS- GjQVvxswCfCfZwXxsu1TEyGpT8Y8q)

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

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

Assume the following.

$$\forall X0. \forall X1. (X1 = k10\_xtuple\_0 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (\exists X3. k4\_tarski X3 X2 \in X0)) \quad (2)$$

Assume the following.

$$\forall X0. (v1\_relat\_1 X0) \Rightarrow (\forall X1. \forall X2. (X2 = k7\_relat\_1 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow (\exists X4. (k4\_tarski X4 X3 \in X0) \wedge (X4 \in X1)))) \quad (3)$$

Assume the following.

$$\forall X0. (v1\_relat\_1 X0) \Rightarrow (\forall X1. \forall X2. (v1\_relat\_1 X2) \Rightarrow ((X2 = k5\_relat\_1 X0 X1) \Leftrightarrow (\forall X3. \forall X4. (k4\_tarski X3 X4 \in X2) \Leftrightarrow ((X3 \in X1) \wedge (k4\_tarski X3 X4 \in X0)))))) \quad (4)$$

## Theorem 1

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