

t8\_partit\_2  
(TMMZ5WJo6urj8ED5MpEviV29yacwZUy8vhh)

October 27, 2020

Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $r1\_relat\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_relat\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (v1\_relat\_1 X2) \Rightarrow ((k4\_tarski X0 X1 \in X2) \Rightarrow ((X0 \in k1\_relat\_1 X2) \wedge (X1 \in k1\_relat\_1 X2))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (2)$$

Assume the following.

$$\forall X0. (v1\_relat\_1 X0) \Rightarrow (\forall X1. (r1\_relat\_2 X0 X1) \Leftrightarrow (\forall X2. (X2 \in X1) \Rightarrow (k4\_tarski X2 X2 \in X0))) \quad (3)$$

**Theorem 1**

$$\forall X0. (v1\_relat\_1 X0) \Rightarrow (\forall X1. (r1\_relat\_2 X0 X1) \Rightarrow (r1\_tarski X1 (k1\_relat\_1 X0)))$$