

t38\_funct\_6  
(TMPNEQKgiZ9LRa5Smf3o1woFen3otZjKk5y)

October 27, 2020

Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k7\_funct\_6 : \iota \Rightarrow \iota$  be given. Let  $k4\_card\_3 : \iota \Rightarrow \iota$  be given. Let  $k3\_funct\_6 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (r1\_tarski (k4\_card\_3 (k3\_funct\_6 X0)) (k10\_xtuple\_0 (k7\_funct\_6 X0))) \quad (1)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (r1\_tarski (k10\_xtuple\_0 (k7\_funct\_6 X0)) (k4\_card\_3 (k3\_funct\_6 X0))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X0 = X1) \Leftrightarrow ((r1\_tarski X0 X1) \wedge (r1\_tarski X1 X0)) \quad (3)$$

**Theorem 1**

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (k10\_xtuple\_0 (k7\_funct\_6 X0) = k4\_card\_3 (k3\_funct\_6 X0))$$