

t45\_yellow20  
(TMK6bbs4ry8hjh74zGbc5dYNGAcnUahHoa5)

October 27, 2020

Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_funct\_4 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(v1\_relat\_1 X0) \Rightarrow (r1\_tarski X0 (k2\_zfmisc\_1 (k9\_xtuple\_0 X0) (k10\_xtuple\_0 X0))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1\_relat\_1 X2) \wedge (v1\_funct\_1 X2)) \Rightarrow ((r1\_tarski (k9\_xtuple\_0 X2) (k2\_zfmisc\_1 X0 X1)) \Rightarrow (k2\_funct\_4 (k2\_funct\_4 X2) = X2)) \quad (2)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (r1\_tarski (k2\_funct\_4 (k2\_funct\_4 X0)) X0) \quad (3)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (\forall X1.((v1\_relat\_1 X1) \wedge (v1\_funct\_1 X1)) \Rightarrow ((r1\_tarski X0 X1) \Rightarrow (r1\_tarski (k2\_funct\_4 X0) (k2\_funct\_4 X1)))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1\_tarski X0 X1) \wedge (r1\_tarski X1 X2)) \Rightarrow (r1\_tarski X0 X2) \quad (5)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow ((v1\_relat\_1 (k2\_funct\_4 X0)) \wedge (v1\_funct\_1 (k2\_funct\_4 X0))) \quad (6)$$

**Theorem 1**

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (\forall X1.((v1\_relat\_1 X1) \wedge (v1\_funct\_1 X1)) \Rightarrow (((v1\_relat\_1 (k9\_xtuple\_0 X0)) \wedge (r1\_tarski (k2\_funct\_4 X0) (k2\_funct\_4 X1))) \Rightarrow (r1\_tarski X0 X1)))$$