

# t101\_funct\_7 (TMWMWT- fZNyyzxnXuZ2mZ18jctC3ZPeJ9sJG)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_funct\_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (\forall X1. k2\_funct\_7 X0 X1 (k1\_funct\_1 X0 X1) = X0) \quad (1)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (\forall X1. \forall X2. \forall X3. k2\_funct\_7 (k2\_funct\_7 X0 X3 X1) X3 X2 = k2\_funct\_7 X0 X3 X2) \quad (2)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (\forall X1. \forall X2. r1\_tarski (k10\_xtuple\_0 (k2\_funct\_7 X0 X1 X2)) (k2\_xboole\_0 (k10\_xtuple\_0 X0) (k1\_tarski X2))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow ((v1\_relat\_1 (k2\_funct\_7 X0 X1 X2)) \wedge (v1\_funct\_1 (k2\_funct\_7 X0 X1 X2))) \quad (4)$$

**Theorem 1**

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (\forall X1. \forall X2. r1\_tarski (k10\_xtuple\_0 X0) (k2\_xboole\_0 (k10\_xtuple\_0 (k2\_funct\_7 X0 X1 X2)) (k1\_tarski (k1\_funct\_1 X0 X1))))$$