

## l81\_funct\_7

(TMZWN2zZVGbVyQNGDfww59RixBZ7xRkEHLr)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $k3\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_partfun1 : \iota \Rightarrow \iota$  be given. Let  $k1\_relat\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k4\_relat\_1 : \iota \Rightarrow \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. r1\_tarski X0 (k2\_xboole\_0 X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (v1\_relat\_1 X1) \Rightarrow ((r1\_tarski (k10\_xtuple\_0 X1) X0) \Rightarrow (k3\_relat\_1 X1 (k4\_relat\_1 X0) = X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (v1\_relat\_1 X1) \Rightarrow ((r1\_tarski (k9\_xtuple\_0 X1) X0) \Rightarrow (k3\_relat\_1 (k4\_relat\_1 X0) X1 = X1)) \quad (3)$$

Assume the following.

$$\forall X0. k6\_partfun1 X0 = k4\_relat\_1 X0 \quad (4)$$

Assume the following.

$$\forall X0. (v1\_relat\_1 X0) \Rightarrow (k1\_relat\_1 X0 = k2\_xboole\_0 (k9\_xtuple\_0 X0) (k10\_xtuple\_0 X0)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. k2\_xboole\_0 X0 X1 = k2\_xboole\_0 X1 X0 \quad (6)$$

**Theorem 1**

$$\forall X0. (v1\_relat\_1 X0) \Rightarrow ((k3\_relat\_1 (k6\_partfun1 (k1\_relat\_1 X0)) X0 = X0) \wedge (k3\_relat\_1 X0 (k6\_partfun1 (k1\_relat\_1 X0)) = X0))$$