

t20\_funct\_4 (TM-  
bGqTPb4P7UMjyPtvMSANRASgiK4TK2TYj)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k1\_funct\_4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \wedge ((v1\_relat\_1 X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_xboole\_0 X1)))) \Rightarrow (k1\_funct\_4 X1 X0 = X0) \quad (1)$$

Assume the following.

$$v1\_xboole\_0 k1\_xboole\_0 \quad (2)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Rightarrow (v1\_relat\_1 X0) \quad (3)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Rightarrow (v1\_funct\_1 X0) \quad (4)$$

**Theorem 1**

$$\forall X0. ((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (k1\_funct\_4 k1\_xboole\_0 X0 = X0)$$