

t9\_margrel1  
(TMY8NT3rKRBf3kJoYDfniYAtXkBJjPhNPqa)

October 27, 2020

Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k4\_margrel1 : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_margrel1 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. \forall X2. (m1\_subset\_1 X2 (k3\_margrel1 X0)) \Rightarrow ((r1\_tarski X1 X2) \Rightarrow (m1\_subset\_1 X1 (k3\_margrel1 X0)))) \quad (1)$$

Assume the following.

$$\forall X0. (r1\_tarski X0 k1\_xboole\_0) \Rightarrow (X0 = k1\_xboole\_0) \quad (2)$$

Assume the following.

$$\exists X0. v1\_xboole\_0 X0 \quad (3)$$

Assume the following.

$$\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (m1\_subset\_1 (k4\_margrel1 X0) (k3\_margrel1 X0)) \quad (4)$$

Assume the following.

$$\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k3\_margrel1 X0)) \Rightarrow ((X1 = k4\_margrel1 X0) \Leftrightarrow (\forall X2. (m2\_finseq\_1 X2 X0) \Rightarrow (\neg X2 \in X1)))) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (6)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Leftrightarrow (\forall X1. \neg X1 \in X0) \quad (7)$$

**Theorem 1**  $\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (k4\_margrel1 X0 = k1\_xboole\_0)$ .