

## t54\_classes2

(TMZrt9RisHNy72GJNEyfCCcMrPywcxAquBr)

October 27, 2020

Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_classes2 : \iota \Rightarrow o$  be given. Let  $r3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1\_xboole\_0 X0) \wedge (v1\_classes2 X0)) \Rightarrow (\forall X1. \\ & ((\neg v1\_xboole\_0 X1) \wedge (v1\_classes2 X1)) \Rightarrow ((r1\_tarski X0 X1) \vee (X1 \in X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (r3\_xboole\_0 X0 X1) \Leftrightarrow ((r1\_tarski X0 X1) \vee \\ & (r1\_tarski X1 X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (\neg X1 \in X0) \quad (3)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((\neg v1\_xboole\_0 X0) \wedge (v1\_classes2 X0)) \Rightarrow (\forall X1. \\ & ((\neg v1\_xboole\_0 X1) \wedge (v1\_classes2 X1)) \Rightarrow (r3\_xboole\_0 X0 X1)) \end{aligned}$$