

## t52\_classes2

(TMZQDgqQyMn8Qvmcf62FuetGRfYf9cGHURq)

October 27, 2020

Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_classes2 : \iota \Rightarrow o$  be given. Let  $k4\_classes1 : \iota \Rightarrow \iota$  be given. Let  $k2\_ordinal1 : \iota \Rightarrow \iota$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.((\neg v1\_xboole\_0 X0) \wedge (v1\_classes2 X0)) \Rightarrow (X0 = k4\_classes1 (k2\_ordinal1 X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v3\_ordinal1 X0) \Rightarrow (\forall X1.(v3\_ordinal1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (k4\_classes1 X0 \in k4\_classes1 X1))) \quad (2)$$

Assume the following.

$$\forall X0.(v3\_ordinal1 X0) \Rightarrow (\forall X1.(v3\_ordinal1 X1) \Rightarrow (\neg (\neg X0 \in X1) \wedge ((X0 \neq X1) \wedge (\neg X1 \in X0)))) \quad (3)$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0 X0) \wedge (v1\_classes2 X0)) \Rightarrow (v3\_ordinal1 (k2\_ordinal1 X0)) \quad (4)$$

### Theorem 1

$$\forall X0.((\neg v1\_xboole\_0 X0) \wedge (v1\_classes2 X0)) \Rightarrow (\forall X1. ((\neg v1\_xboole\_0 X1) \wedge (v1\_classes2 X1)) \Rightarrow (\neg (\neg X0 \in X1) \wedge ((X0 \neq X1) \wedge (\neg X1 \in X0))))$$