

## l26\_classes2

(TMTTpjsAEzxLUSNcKhufjgqBqvEQgtYq3Y6)

October 27, 2020

Let  $v2\_classes1 : \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k2\_ordinal1 : \iota \Rightarrow \iota$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_classes1 : \iota \Rightarrow \iota$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v2\_classes1 X0) \Rightarrow (k2\_ordinal1 X0 = k1\_card\_1 X0) \quad (1)$$

Assume the following.

$$k4\_classes1 k1\_xboole\_0 = k1\_xboole\_0 \quad (2)$$

Assume the following.

$$k1\_card\_1 k1\_xboole\_0 = k1\_xboole\_0 \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k2\_ordinal1 X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow ((X2 \in X0) \wedge (v3\_ordinal1 X2))) \quad (4)$$

### Theorem 1

$$\begin{aligned} & \forall X0.((v2\_classes1 X0) \wedge (k1\_xboole\_0 \in k2\_ordinal1 X0)) \Rightarrow \\ & ((k1\_card\_1 (k4\_classes1 k1\_xboole\_0) \in k1\_card\_1 X0) \wedge (k4\_classes1 \\ & \quad k1\_xboole\_0 \in X0)) \end{aligned}$$