

## t12\_zf\_refle

(TMSqReCc1CnZAVxmY85EtcI7TbD1ZVahXx1)

October 27, 2020

Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k2\_ordinal1 : \iota \Rightarrow \iota$  be given. Let  $k4\_classes1 : \iota \Rightarrow \iota$  be given. Let  $k6\_classes1 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v3\_ordinal1 X0) \Rightarrow (k6\_classes1 X0 = X0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(v3\_ordinal1 X1) \Rightarrow ((X0 \in k4\_classes1 X1) \Leftrightarrow (k6\_classes1 X0 \in X1)) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1 X0 X1) \quad (3)$$

Assume the following.

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

Assume the following.

$$\forall X0.(v3\_ordinal1 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 X0) \Rightarrow (v3\_ordinal1 X1)) \quad (5)$$

**Theorem 1**  $\forall X0.(v3\_ordinal1 X0) \Rightarrow (k2\_ordinal1 (k4\_classes1 X0) = X0)$ .