

## t38\_zfrefle1

(TMFy4LozWVLY2FcR8BpuLA4rhn6b2x23V7P)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_classes2 : \iota \Rightarrow o$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k4\_classes1 : \iota \Rightarrow \iota$  be given. Let  $r2\_zfrefle1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r3\_zfrefle1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.(\neg v1\_xboole\_0 X1) \Rightarrow ((r3\_zfrefle1 X0 X1) \Rightarrow (r2\_zfrefle1 X0 X1))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\neg(X0 \in X1) \wedge (v1\_xboole\_0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1\_xboole\_0 X0) \wedge (v1\_classes2 X0)) \Rightarrow (\forall X1. \\ & ((v3\_ordinal1 X1) \wedge (m1\_subset\_1 X1 X0)) \Rightarrow (\neg(k4\_ordinal1 \in X0) \wedge \\ & (\forall X2.((v3\_ordinal1 X2) \wedge (m1\_subset\_1 X2 X0)) \Rightarrow (\forall X3. \\ & (\neg v1\_xboole\_0 X3) \Rightarrow (\neg(X1 \in X2) \wedge ((X3 = k4\_classes1 X2) \wedge (r3\_zfrefle1 \\ & X3 X0))))))) \quad (3) \end{aligned}$$

### Theorem 1

$$\begin{aligned} & \forall X0.((\neg v1\_xboole\_0 X0) \wedge (v1\_classes2 X0)) \Rightarrow (\forall X1. \\ & ((v3\_ordinal1 X1) \wedge (m1\_subset\_1 X1 X0)) \Rightarrow (\neg(k4\_ordinal1 \in X0) \wedge \\ & (\forall X2.((v3\_ordinal1 X2) \wedge (m1\_subset\_1 X2 X0)) \Rightarrow (\forall X3. \\ & (\neg v1\_xboole\_0 X3) \Rightarrow (\neg(X1 \in X2) \wedge ((X3 = k4\_classes1 X2) \wedge (r2\_zfrefle1 \\ & X3 X0))))))) \end{aligned}$$