

## t23\_ordinal5

(TMQxD1RQgP636c7JqaNuwnAh84pfJSdUT5H)

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Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $r1\_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_ordinal5 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_ordinal1 : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v3\_ordinal1 X0) \Rightarrow (\forall X1.(v3\_ordinal1 X1) \Rightarrow (\forall X2. \\ (v3\_ordinal1 X2) \Rightarrow (((r1\_ordinal1 X0 X1) \wedge (k6\_numbers \in X2)) \Rightarrow (r1\_ordinal1 \\ (k1\_ordinal5 X2 X0) (k1\_ordinal5 X2 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v3\_ordinal1 X0) \Rightarrow (\forall X1.(v3\_ordinal1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (r1\_ordinal1 (k1\_ordinal1 X0) X1))) \quad (2)$$

Assume the following.

$$\forall X0.(v3\_ordinal1 X0) \Rightarrow (k1\_ordinal5 X0 np\_1 = X0) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(v3\_ordinal1 X1) \Rightarrow ((X0 \in X1) \Rightarrow (v3\_ordinal1 X0)) \quad (4)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (5)$$

Assume the following.

$$np\_1 = k1\_ordinal1 k1\_xboole\_0 \quad (6)$$

Assume the following.

$$\forall X0.(v3\_ordinal1 X0) \Rightarrow ((\neg v1\_xboole\_0 (k1\_ordinal1 X0)) \wedge (v3\_ordinal1 (k1\_ordinal1 X0))) \quad (7)$$

### Theorem 1

$$\forall X0.(v3\_ordinal1 X0) \Rightarrow (\forall X1.(v3\_ordinal1 X1) \Rightarrow ((k6\_numbers \in X0) \wedge (k6\_numbers \in X1)) \Rightarrow (r1\_ordinal1 X0 (k1\_ordinal5 X0 X1))))$$