

## l7\_nat\_5

(TMVsWV1KZL4zhy4FcZ4NAmAEnT6EzCfoGEw)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $k1\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v6\_membered : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (m1\_subset\_1 X0 (k1\_zfmisc\_1 k5\_numbers)) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X0 (k1\_zfmisc\_1 X1)) \Leftrightarrow (r1\_tarski X0 X1) \quad (2)$$

Assume the following.

$$\forall X0.((v1\_finset\_1 X0) \wedge (v6\_membered X0)) \Rightarrow (\exists X1. (v7\_ordinal1 X1) \wedge (r1\_tarski X0 X1)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.v1\_finset\_1 (k1\_enumset1 X0 X1 X2) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7\_ordinal1 X0) \wedge ((v7\_ordinal1 X1) \wedge (v7\_ordinal1 X2))) \Rightarrow (v6\_membered (k1\_enumset1 X0 X1 X2)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (6)$$

### Theorem 1

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow (\forall X2. (v7\_ordinal1 X2) \Rightarrow ((v1\_finset\_1 (k1\_enumset1 X0 X1 X2)) \wedge (m1\_subset\_1 (k1\_enumset1 X0 X1 X2) (k1\_zfmisc\_1 k5\_numbers))))))$$