

t11\_finseq\_3  
(TMazunCy5PEq5AaPKykQgqMpNveEsRSCQwp)

October 27, 2020

Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k2\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k1\_ordinal1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow ((r1\_xxreal\_0 X0 X1) \Leftrightarrow (r1\_tarski (k2\_finseq\_1 X0) (k2\_finseq\_1 X1)))) \quad (1)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (k1\_nat\_1 X0 np\_1 \in k2\_finseq\_1 (k1\_nat\_1 X0 np\_1)) \quad (2)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow ((\neg r1\_xxreal\_0 (k1\_nat\_1 X1 np\_1) X0) \Leftrightarrow (r1\_xxreal\_0 X0 X1))) \quad (3)$$

Assume the following.

$$\forall X0.((v3\_ordinal1 X0) \wedge (v7\_ordinal1 X0)) \Rightarrow (v7\_ordinal1 (k1\_ordinal1 X0)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (5)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (k1\_ordinal1 X0 = k1\_nat\_1 X0 np\_1) \quad (6)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (v3\_ordinal1 X0) \quad (7)$$

**Theorem 1**

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow ((\neg r1\_xxreal\_0 X1 X0) \Rightarrow (k1\_nat\_1 X0 np\_1 \in k2\_finseq\_1 X1)))$$