

## t24\_afinsq\_2

(TMbi4XncvBCYmm9Vp9nbZzfDHaHYUaXxPmp)

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Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $v6\_membered : \iota \Rightarrow o$  be given. Let  $r1\_afinsq\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (\neg(\neg r1\_xboole\_0 X0 X1) \wedge (\forall X2. \neg(X2 \in X0) \wedge (X2 \in X1))) \wedge (\neg(\exists X2. (X2 \in X0) \wedge (X2 \in X1)) \wedge (r1\_xboole\_0 X0 X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_xxreal\_0 X0) \wedge (v1\_xxreal\_0 X1)) \Rightarrow (r1\_xxreal\_0 X0 X0) \quad (2)$$

Assume the following.

$$\forall X0. (v6\_membered X0) \Leftrightarrow (\forall X1. (X1 \in X0) \Rightarrow (v7\_ordinal1 X1)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_afinsq\_2 X0 X1) \Leftrightarrow (\forall X2. (v7\_ordinal1 X2) \Rightarrow (\forall X3. (v7\_ordinal1 X3) \Rightarrow (\neg(X2 \in X0) \wedge ((X3 \in X1) \wedge (r1\_xxreal\_0 X3 X2))))) \quad (4)$$

Assume the following.

$$\forall X0. (v7\_ordinal1 X0) \Rightarrow (v1\_xxreal\_0 X0) \quad (5)$$

### Theorem 1

$$\forall X0. ((v1\_finset\_1 X0) \wedge (v6\_membered X0)) \Rightarrow (\forall X1. ((v1\_finset\_1 X1) \wedge (v6\_membered X1)) \Rightarrow ((r1\_afinsq\_2 X0 X1) \Rightarrow (r1\_xboole\_0 X0 X1)))$$