

## t5\_afinsq\_1

(TMMM69nrXFWRawhYX1wXUkAFAS3vuXFdpRU)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $v5\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow ((v1\_finset\_1 (k9\_xtuple\_0 X0)) \Leftrightarrow (v1\_finset\_1 X0)) \quad (1)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_finset\_1 X0)) \Rightarrow (v1\_finset\_1 (k9\_xtuple\_0 X0)) \quad (2)$$

Assume the following.

$$\forall X0.(v5\_ordinal1 X0) \Leftrightarrow (v3\_ordinal1 (k9\_xtuple\_0 X0)) \quad (3)$$

Assume the following.

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

Assume the following.

$$\forall X0.((v3\_ordinal1 X0) \wedge (v1\_finset\_1 X0)) \Rightarrow (v7\_ordinal1 X0) \quad (5)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (v1\_finset\_1 X0) \quad (6)$$

### Theorem 1

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (((v1\_finset\_1 X0) \wedge (v5\_ordinal1 X0)) \Leftrightarrow (\exists X1.(v7\_ordinal1 X1) \wedge (k9\_xtuple\_0 X0 = X1)))$$