

t5\_revrot\_1  
(TMH6QPqqh2SYeJxjV7Pr22xCW9G4tJbwVLs)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_revrot\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_finseq\_5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k12\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_1 : \iota \Rightarrow o$  be given. Let  $k7\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_rfinseq : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r2\_finseq\_4 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_finseq\_4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k8\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (1)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow ((k7\_finseq\_1 X0 k1\_xboole\_0 = X0) \wedge (k7\_finseq\_1 k1\_xboole\_0 X0 = X0)) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1 X1 X0) \Rightarrow (k2\_rfinseq X0 (k3\_finseq\_1 X1) X1 = k1\_xboole\_0) \quad (3)$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.(m2\_finseq\_1 X1 X0) \Rightarrow ((r2\_finseq\_4 X1 (k7\_partfun1 X0 X1 (k3\_finseq\_1 X1))) \Rightarrow (k4\_finseq\_4 X1 (k7\_partfun1 X0 X1 (k3\_finseq\_1 X1)) = k3\_finseq\_1 X1))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0 X0) \wedge (m1\_finseq\_1 X1 X0)) \Rightarrow ((r1\_revrot\_1 X0 X1 X2) \Leftrightarrow (r2\_finseq\_4 X1 X2)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1 X1 X0)\Leftrightarrow(m1\_finseq\_1 X1 X0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_finseq\_1 X1 X0)\wedge(m1\_finseq\_1 X2 X0))\Rightarrow(k8\_finseq\_1 X0 X1 X2 = k7\_finseq\_1 X1 X2) \quad (7)$$

Assume the following.

$$\forall X0.\exists X1.(m1\_finseq\_1 X1 X0)\wedge((v1\_relat\_1 X1)\wedge((v4\_relat\_1 X1 k5\_numbers)\wedge((v5\_relat\_1 X1 X0)\wedge((v1\_funct\_1 X1)\wedge((v1\_xboole\_0 X1)\wedge((v1\_finset\_1 X1)\wedge(v1\_finseq\_1 X1))))))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1 X1 X0)\Rightarrow((v1\_relat\_1 X1)\wedge((v1\_funct\_1 X1)\wedge(v1\_finseq\_1 X1))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1\_relat\_1 X1)\wedge((v5\_relat\_1 X1 X0)\wedge(v1\_funct\_1 X1)))\Rightarrow(m1\_subset\_1 (k7\_partfun1 X0 X1 X2) X0) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0 X0)\wedge(m1\_subset\_1 X1 X0))\Rightarrow(m2\_finseq\_1 (k12\_finseq\_1 X0 X1) X0) \quad (11)$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0 X0)\Rightarrow(\forall X1.(m2\_finseq\_1 X1 X0)\Rightarrow(\forall X2.(m1\_subset\_1 X2 X0)\Rightarrow(k2\_finseq\_5 X0 X1 X2 = k8\_finseq\_1 X0 X1 (k12\_finseq\_1 X0 X2) (k2\_rfinseq X0 (k4\_finseq\_4 X1 X2) X1)))) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1 X1 X0)\Rightarrow(v5\_relat\_1 X1 X0) \quad (13)$$

**Theorem 1**

$$\forall X0.(\neg v1\_xboole\_0 X0)\Rightarrow(\forall X1.(m2\_finseq\_1 X1 X0)\Rightarrow((r1\_revrot\_1 X0 X1 (k7\_partfun1 X0 X1 (k3\_finseq\_1 X1)))\Rightarrow(k2\_finseq\_5 X0 X1 (k7\_partfun1 X0 X1 (k3\_finseq\_1 X1)) = k12\_finseq\_1 X0 (k7\_partfun1 X0 X1 (k3\_finseq\_1 X1))))))$$