

# t11\_topalg\_1 (TMMSaBD- nCMDt4wJ4WDCZHEmwWmpTFUG3Kyx)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $m2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k1\_euclid : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k17\_borsuk\_1 : \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k12\_euclid : \iota \Rightarrow \iota$  be given. Let  $k9\_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k1\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1\_xboole\_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. (v1\_xreal\_0 X0) \Rightarrow (((r1\_xxreal\_0 k6\_numbers X0) \wedge (r1\_xxreal\_0 X0 np\_1)) \Leftrightarrow (X0 \in u1\_struct\_0 k17\_borsuk\_1)) \quad (2)$$

Assume the following.

$$u1\_struct\_0 k17\_borsuk\_1 = k1\_rcomp\_1 k6\_numbers np\_1 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 X1) \Rightarrow ((v1\_xboole\_0 X1) \vee (X0 \in X1)) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. (v1\_xreal\_0 X0) \Rightarrow (\forall X1. (v7\_ordinal1 X1) \Rightarrow (\forall X2. \\ (m2\_finseq\_2 X2 k1\_numbers (k1\_euclid X1)) \Rightarrow (((r1\_xxreal\_0 k6\_numbers \\ X0) \wedge (r1\_xxreal\_0 X0 np\_1)) \Rightarrow (r1\_xxreal\_0 (k12\_euclid (k9\_euclid \\ X1 X2 X0)) (k12\_euclid X2)))))) \end{aligned} \quad (5)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (6)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 k17\_borsuk\_1)) \Rightarrow (m1\_subset\_1 X0 k1\_numbers) \quad (7)$$

Assume the following.

$$(k6\_numbers \in k1\_rcomp\_1 k6\_numbers np\_1) \wedge (np\_1 \in k1\_rcomp\_1 k6\_numbers np\_1) \quad (8)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (v1\_xreal\_0 X0) \quad (9)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(m2\_finseq\_2 X1 k1\_numbers \\ & (k1\_euclid X0)) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 k17\_borsuk\_1)) \Rightarrow \\ & (r1\_xxreal\_0 (k12\_euclid (k9\_euclid X0 X1 X2)) (k12\_euclid X1)))) \end{aligned}$$