

## t45\_borsuk\_7

(TMQMwE5abUiz3gCmr7fMr5gCTuP986pSThx)

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Let  $v1\_int\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k15\_euclid : \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $k12\_euclid : \iota \Rightarrow \iota$  be given. Let  $k3\_euclid\_3 : \iota \Rightarrow \iota$  be given. Let  $k7\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k8\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k32\_sin\_cos : \iota$  be given. Let  $k1\_euclid\_3 : \iota \Rightarrow \iota$  be given. Let  $k2\_euclid\_3 : \iota \Rightarrow \iota$  be given. Let  $k17\_complex1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k1\_comptrig : \iota \Rightarrow \iota$  be given. Let  $k2\_numbers : \iota$  be given. Assume the following.

$$\forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow (k1\_euclid\_3 (k2\_euclid\_3 X0) = X0) \quad (1)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow (k17\_complex1 (k2\_euclid\_3 X0) = k12\_euclid X0) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1\_int\_1 X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xcmplx\_0 X2) \Rightarrow (((k17\_complex1 X1 = k17\_complex1 X2) \wedge (k1\_comptrig \\ & X1 = k7\_real\_1 (k1\_comptrig X2) (k8\_real\_1 (k8\_real\_1 np\_2 k32\_sin\_cos) \\ & X0))) \Rightarrow (X1 = X2)))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow (m1\_subset\_1 (k2\_euclid\_3 X0) k2\_numbers) \quad (4)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow (k3\_euclid\_3 X0 = k1\_comptrig (k2\_euclid\_3 X0)) \quad (5)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k2\_numbers) \Rightarrow (v1\_xcmplx\_0 X0) \quad (6)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v1\_int\_1 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 \\ & (k15\_euclid np\_2))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 \\ & (k15\_euclid np\_2))) \Rightarrow (((k12\_euclid X1 = k12\_euclid X2) \wedge (k3\_euclid\_3 \\ & X1 = k7\_real\_1 (k3\_euclid\_3 X2) (k8\_real\_1 (k8\_real\_1 np\_2 k32\_sin\_cos) \\ & X0))) \Rightarrow (X1 = X2)))) \end{aligned}$$