

l4\_topreal2  
(TMXmcq5VqtocbhKNp hhPHmRL7eTrespL2Ji)

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Let  $k17\_euclid : \iota \Rightarrow \iota$  be given. Let  $k19\_euclid : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $k18\_euclid : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k1\_xboolean : \iota$  be given. Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow ((k17\_euclid (k19\_euclid X0 X1) = X0) \wedge (k18\_euclid (k19\_euclid X0 X1) = X1))) \quad (1)$$

Assume the following.

$$m1\_subset\_1 k6\_numbers k1\_numbers \quad (2)$$

Assume the following.

$$k1\_xboolean = k6\_numbers \quad (3)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (v1\_xreal\_0 X0) \quad (4)$$

**Theorem 1**  $k17\_euclid (k19\_euclid k6\_numbers k6\_numbers) = k6\_numbers$ .