l29_topreal2 (TMJvLJ29VXq539hPBBKVzf9hmVLC7zmUb8d)

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Let $k19\_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ 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 $k17\_euclid : \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k18\_euclid : \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $np\_\_0 : \iota$ be given. Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{1}$$

Assume the following.

$$\begin{gathered}((v2\_xxreal\_0\ np\_\_1) \wedge (m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers)) \wedge \\ ((m1\_subset\_1\ np\_\_1\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_1\ k1\_numbers))\end{gathered} \tag{2}$$

Assume the following.

$$v1\_xboole\_0\ np\_\_0 \tag{3}$$

Assume the following.

$$r1\_xxreal\_0\ np\_\_1\ np\_\_1 \tag{4}$$

Assume the following.

$$r1\_xxreal\_0\ np\_\_0\ np\_\_1 \tag{5}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{6}$$

Assume the following.

$$k18\_euclid\ (k19\_euclid\ np\_\_1\ np\_\_1) = np\_\_1 \tag{7}$$

Assume the following.

$$k17\_euclid\ (k19\_euclid\ np\_\_1\ np\_\_1) = np\_\_1 \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0\ X0)\wedge(v1\_xreal\_0\ X1))\Rightarrow(m1\_subset\_1\ (k19\_euclid\ X0\ X1)\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \tag{9}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(v1\_xreal\_0\ X0) \tag{10}$$

Theorem 1

$$k19\_euclid\ np\_\_1\ np\_\_1 \in ReplSep\ (toset\ (\lambda X0 : \iota.m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\ (\lambda X0 : \iota.\neg(\neg(k17\_euclid\ X0 = k6\_numbers)\wedge((r1\_xxreal\_0\ (k18\_euclid\ X0)\ np\_\_1)\wedge(r1\_xxreal\_0\ k6\_numbers\ (k18\_euclid\ X0))))\wedge((\neg(r1\_xxreal\_0\ (k17\_euclid\ X0)\ np\_\_1)\wedge((r1\_xxreal\_0\ k6\_numbers\ (k17\_euclid\ X0))\wedge(k18\_euclid\ X0 = np\_\_1)))\wedge((\neg(r1\_xxreal\_0\ (k17\_euclid\ X0)\ np\_\_1)\wedge((r1\_xxreal\_0\ k6\_numbers\ (k17\_euclid\ X0))\wedge(k18\_euclid\ X0 = k6\_numbers)))\wedge(\neg(k17\_euclid\ X0 = np\_\_1)\wedge((r1\_xxreal\_0\ (k18\_euclid\ X0)\ np\_\_1)\wedge(r1\_xxreal\_0\ k6\_numbers\ (k18\_euclid\ X0)))))))\ (\lambda X0 : \iota.X0)$$