t19_pdiff_7 (TMWpctpXvDx8SV75jWjSqetxZGANHNy4jvx)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $k1\_numbers : \iota$ be given. Let $m2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_euclid : \iota \Rightarrow \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np\_\_1 : \iota$ be given. Let $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_pdiff\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_pdiff\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_euclid : \iota \Rightarrow \iota$ be given. Let $k10\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k5\_numbers) \Rightarrow (\forall X2.(m2\_finseq\_2\ X2\ k1\_numbers\ (k1\_euclid\ X0)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ k1\_numbers) \Rightarrow ((k8\_euclid\ X0\ (k3\_funct\_2\ k1\_numbers\ (k1\_euclid\ X0)\ (k6\_pdiff\_1\ X0\ X1\ X2)\ X3)\ X2 = k3\_funct\_2\ k1\_numbers\ (k1\_euclid\ X0)\ (k6\_pdiff\_1\ X0\ X1\ (k5\_euclid\ X0))\ (k10\_binop\_2\ X3\ (k1\_seq\_1\ (k1\_pdiff\_1\ X1\ X0)\ X2))) \wedge (k8\_euclid\ X0\ X2\ (k3\_funct\_2\ k1\_numbers\ (k1\_euclid\ X0)\ (k6\_pdiff\_1\ X0\ X1\ X2)\ X3) = k3\_funct\_2\ k1\_numbers\ (k1\_euclid\ X0)\ (k6\_pdiff\_1\ X0\ X1\ (k5\_euclid\ X0))\ (k10\_binop\_2\ (k1\_seq\_1\ (k1\_pdiff\_1\ X1\ X0)\ X2)\ X3)))))) \tag{1}$$

Theorem 1

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge (m1\_subset\_1\ X0\ k5\_numbers)) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k1\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ k1\_numbers) \Rightarrow (\forall X3.(m2\_finseq\_2\ X3\ k1\_numbers\ (k1\_euclid\ X0)) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ k5\_numbers) \Rightarrow (((r1\_xxreal\_0\ np\_\_1\ X4) \wedge ((r1\_xxreal\_0\ X4\ X0) \wedge (X2 = k1\_seq\_1\ (k1\_pdiff\_1\ X4\ X0)\ X3))) \Rightarrow ((k8\_euclid\ X0\ (k3\_funct\_2\ k1\_numbers\ (k1\_euclid\ X0)\ (k6\_pdiff\_1\ X0\ X4\ X3)\ X1)\ X3 = k3\_funct\_2\ k1\_numbers\ (k1\_euclid\ X0)\ (k6\_pdiff\_1\ X0\ X4\ (k5\_euclid\ X0))\ (k10\_binop\_2\ X1\ X2)) \wedge (k8\_euclid\ X0\ X3\ (k3\_funct\_2\ k1\_numbers\ (k1\_euclid\ X0)\ (k6\_pdiff\_1\ X0\ X4\ X3)\ X1) = k3\_funct\_2\ k1\_numbers\ (k1\_euclid\ X0)\ (k6\_pdiff\_1\ X0\ X4\ (k5\_euclid\ X0))\ (k10\_binop\_2\ X2\ X1)))))))))$$