

t51_nat_d
(TMZtZxowi8g7gMrRYtv5fJtTBNurDapF5dG)

October 27, 2020

Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k7_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((\\ (r1_xxreal_0 np_1 (k7_nat_d X0 X1)) \vee (r1_xxreal_0 np_1 (k6_xcmplx_0 \\ X0 X1))) \Rightarrow (k7_nat_d X0 X1 = k6_xcmplx_0 X0 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((\\ \neg r1_xxreal_0 (k2_xcmplx_0 X0 X1) X0) \Leftrightarrow (r1_xxreal_0 np_1 X1))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ (v1_xreal_0 X2) \Rightarrow ((r1_xxreal_0 X0 (k6_xcmplx_0 X1 X2)) \Rightarrow (r1_xxreal_0 \\ (k2_xcmplx_0 X0 X2) X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_xreal_0 X0) \quad (4)$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\neg \\ (r1_xxreal_0 np_1 X0) \wedge ((r1_xxreal_0 np_1 (k7_nat_d X1 X0)) \wedge \\ (r1_xxreal_0 X1 (k7_nat_d X1 X0)))))) \end{aligned}$$