

t1_flang_2

(TMZ6g3ZKZrGxDicMUyTVUJPM8G2Nr2bXr28)

October 27, 2020

Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k1_xreal_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ (v7_ordinal1\ X2) \Rightarrow ((r1_xreal_0\ X0\ (k2_xcmplx_0\ X1\ X2)) \Rightarrow (r1_xreal_0 \\ (k7_nat_d\ X0\ X2)\ X1)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(v1_xcmplx_0\ X0) \Rightarrow (\forall X1.(v1_xcmplx_0\ X1) \Rightarrow (X0 = k6_xcmplx_0\ (k2_xcmplx_0\ X0\ X1)\ X1)) \tag{2}$$

Assume the following.

$$\forall X0.(v1_xreal_0\ X0) \Rightarrow (\forall X1.(v1_xreal_0\ X1) \Rightarrow ((r1_xreal_0\ X0\ X1) \Rightarrow (k1_xreal_0\ X1\ X0 = k6_xcmplx_0\ X1\ X0))) \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ (v7_ordinal1\ X2) \Rightarrow (\neg(\neg(r1_xreal_0\ X0\ X1) \wedge (r1_xreal_0\ X2\ X1)) \wedge \\ (r1_xreal_0\ (k2_xcmplx_0\ X0\ X2)\ X1)))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0\ X0) \Rightarrow (\forall X1.(v1_xreal_0\ X1) \Rightarrow (\forall X2. \\ (v1_xreal_0\ X2) \Rightarrow ((r1_xreal_0\ (k2_xcmplx_0\ X0\ X1)\ X2) \Leftrightarrow (r1_xreal_0\ X0\ (k6_xcmplx_0\ X2\ X1)))))) \end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow (\neg \\ (r1_xreal_0\ X0\ X1) \wedge (\forall X2.(v7_ordinal1\ X2) \Rightarrow (X1 \neq k2_xcmplx_0\ X0\ X2)))) \end{aligned} \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1\ X0)\wedge(v7_ordinal1\ X1))\Rightarrow(k7_nat_d\ X0\ X1 = k1_xreal_0\ X0\ X1) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0\ X0)\wedge(v1_xcmplx_0\ X1))\Rightarrow(k2_xcmplx_0\ X0\ X1 = k2_xcmplx_0\ X1\ X0) \quad (8)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(v1_xreal_0\ X0) \quad (9)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(v1_xcmplx_0\ X0) \quad (10)$$

Theorem 1

$$\begin{aligned} &\forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(v7_ordinal1\ X1)\Rightarrow(\forall X2. \\ &(v7_ordinal1\ X2)\Rightarrow(\forall X3.(v7_ordinal1\ X3)\Rightarrow(\neg(r1_xreal_0 \\ &(k2_xcmplx_0\ X0\ X1)\ X2)\wedge((r1_xreal_0\ X2\ (k2_xcmplx_0\ X3\ X1))\wedge \\ &(\forall X4.(v7_ordinal1\ X4)\Rightarrow(\neg(k2_xcmplx_0\ X4\ X1 = X2)\wedge((r1_xreal_0 \\ &X0\ X4)\wedge(r1_xreal_0\ X4\ X3)))))))))) \end{aligned}$$