

t2_flang_2

(TMbU43kJoPG2eTfoGRa7nNNm4ERxrMVuwsU)

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 $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow (\forall X3.(v7_ordinal1 X3) \Rightarrow (\neg(r1_xreal_0 \\ & (k2_xcmplx_0 X0 X1) X2) \wedge ((r1_xreal_0 X2 (k2_xcmplx_0 X3 X1)) \wedge \\ & (\forall X4.(v7_ordinal1 X4) \Rightarrow (\neg(k2_xcmplx_0 X4 X1 = X2) \wedge ((r1_xreal_0 \\ & X0 X4) \wedge (r1_xreal_0 X4 X3)))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow (r1_xreal_0 X0 X0) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0) \wedge (v7_ordinal1 X1)) \Rightarrow (v7_ordinal1 (k2_xcmplx_0 X0 X1)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow ((r1_xreal_0 X0 X1) \vee (r1_xreal_0 X1 X0)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (k2_xcmplx_0 X0 X1 = k2_xcmplx_0 X1 X0) \tag{5}$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xcmplx_0 X0) \tag{6}$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_xreal_0 X0) \tag{7}$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(v1_xreal_0\ X0) \quad (8)$$

Theorem 1

$$\begin{aligned} &\forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(v7_ordinal1\ X1)\Rightarrow(\forall X2. \\ &\quad (v7_ordinal1\ X2)\Rightarrow(\forall X3.(v7_ordinal1\ X3)\Rightarrow(\forall X4.(\\ &\quad v7_ordinal1\ X4)\Rightarrow(\neg(r1_xreal_0\ X0\ X1)\wedge((r1_xreal_0\ X2\ X3)\wedge(\\ &\quad (r1_xreal_0\ (k2_xcmplx_0\ X0\ X2)\ X4)\wedge((r1_xreal_0\ X4\ (k2_xcmplx_0 \\ &\quad X1\ X3))\wedge(\forall X5.(v7_ordinal1\ X5)\Rightarrow(\forall X6.(v7_ordinal1 \\ &\quad X6)\Rightarrow(\neg(k2_xcmplx_0\ X5\ X6 = X4)\wedge((r1_xreal_0\ X0\ X5)\wedge((r1_xreal_0 \\ &\quad X5\ X1)\wedge((r1_xreal_0\ X2\ X6)\wedge(r1_xreal_0\ X6\ X3)))))))))))))) \end{aligned}$$