

t7_int_5 (TMQC- QEYUM3KWYRUSPAzu19rNLdCcne2oVqg)

October 27, 2020

Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_int_2 : \iota \Rightarrow o$ be given. Let $r1_int_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_int_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v1_int_1 X2) \Rightarrow (((r1_int_1 X0 (k3_xcmplx_0 X1 X2)) \wedge (k3_int_2 X0 \\ & X1 = np_1)) \Rightarrow (r1_int_1 X0 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v1_int_1 X0) \wedge (v1_int_1 X1)) \Rightarrow (v7_ordinal1 (k3_int_2 X0 X1)) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow ((v1_int_2 X0) \Leftrightarrow ((\neg r1_xxreal_0 X0 \\ & np_1) \wedge (\forall X1.(v7_ordinal1 X1) \Rightarrow (\neg (r1_int_1 X1 X0) \wedge ((X1 \neq \\ & np_1) \wedge (X1 \neq X0)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow ((X2 = k3_int_2 X0 X1) \Leftrightarrow ((r1_int_1 X2 X0) \wedge ((r1_int_1 \\ & X2 X1) \wedge (\forall X3.(v1_int_1 X3) \Rightarrow (((r1_int_1 X3 X0) \wedge (r1_int_1 \\ & X3 X1)) \Rightarrow (r1_int_1 X3 X2)))))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_int_1 X0) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & ((v7_ordinal1 X2) \wedge (v1_int_2 X2)) \Rightarrow (\neg (r1_int_1 X2 (k3_xcmplx_0 \\ & X0 X1)) \wedge ((\neg r1_int_1 X2 X0) \wedge (\neg r1_int_1 X2 X1)))) \end{aligned}$$