

l45_int_4 (TMYsr-
RAp4hKHJWFgufLHt5drgGDQakFtBFs)

October 27, 2020

Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k6_int_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_int_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow ((\neg r1_xxreal_0 X0 k6_numbers) \Rightarrow (\\ \forall X1.(v1_int_1 X1) \Rightarrow ((k6_int_1 X1 X0 = k6_numbers) \Leftrightarrow (r1_int_1 \\ X0 X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ (v1_int_1 X2) \Rightarrow ((r1_int_1 X0 X1) \Rightarrow (r1_int_1 X0 (k3_xcmplx_0 X1 X2)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v1_int_1 X0) \wedge (v1_int_1 X1)) \Rightarrow (v1_int_1 \\ (k3_xcmplx_0 X0 X1)) \quad (3)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_int_1 X0) \quad (4)$$

Theorem 1

$$\begin{aligned} \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ (v7_ordinal1 X2) \Rightarrow ((k6_int_1 X0 X2 = k6_numbers) \Rightarrow ((r1_xxreal_0 \\ X2 k6_numbers) \vee (k6_int_1 (k3_xcmplx_0 X0 X1) X2 = k6_numbers)))))) \end{aligned}$$