

l14_int_2 (TMHm- pHgX1D6Zm6BhhsnqqRqTFnRTmxqxr5D)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_int_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (r1_xxreal_0 k6_numbers X0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow ((X1 = k3_xcmplx_0 X2 X0) \Rightarrow ((X0 = k6_numbers) \vee \\ & (r1_xxreal_0 X2 X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\neg(\neg \\ & r1_xxreal_0 (k3_xcmplx_0 X0 X1) k6_numbers) \wedge ((\neg(\neg r1_xxreal_0 \\ & X0 k6_numbers) \wedge (\neg r1_xxreal_0 X1 k6_numbers)) \wedge (\neg(\neg r1_xxreal_0 \\ & k6_numbers X0) \wedge (\neg r1_xxreal_0 k6_numbers X1)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((\\ & r1_int_1 X0 X1) \Leftrightarrow (\exists X2.(v7_ordinal1 X2) \wedge (X1 = k3_xcmplx_0 \\ & X0 X2)))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_xreal_0 X0) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((\\ & r1_int_1 X1 X0) \Rightarrow ((r1_xxreal_0 X0 k6_numbers) \vee (r1_xxreal_0 X1 \\ & X0)))) \end{aligned}$$