

t10_nat_d (TMJBMyjWVR- sPCwo3CgJPCZQUXBqdmjc98jC)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_nat_d : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $r1_int_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v1_int_1 X2) \Rightarrow (((r1_int_1 X0 X1) \wedge (r1_int_1 X0 (k2_xcmplx_0 X1 \\ & X2))) \Rightarrow (r1_int_1 X0 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v7_ordinal1 X0) \wedge (v7_ordinal1 X1)) \Rightarrow (\\ & (r1_nat_d X0 X1) \Leftrightarrow (r1_int_1 X0 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v7_ordinal1 X0) \wedge (v7_ordinal1 X1)) \Rightarrow (\\ & v7_ordinal1 (k2_xcmplx_0 X0 X1)) \end{aligned} \quad (3)$$

Assume the following.

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

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow (((r1_nat_d X0 X1) \wedge (r1_nat_d X0 (k2_xcmplx_0 \\ & X1 X2))) \Rightarrow (r1_nat_d X0 X2)))) \end{aligned}$$