

t21_int_6

(TMcErnStUwYRP9sXEvD6Lwo8scjG657f741)

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Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $r1_int_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_int_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_int_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_int_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow ((r1_int_2 \\ & X0 X1) \Rightarrow (r1_int_1 (k3_xcmplx_0 X0 X1) (k2_int_2 X0 X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v1_int_1 X2) \Rightarrow (((r1_int_1 X0 X2) \wedge (r1_int_1 X1 X2)) \Rightarrow (r1_int_1 \\ & (k2_int_2 X0 X1) X2)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v1_int_1 X2) \Rightarrow ((r2_int_1 X0 X1 X2) \Leftrightarrow (r1_int_1 X2 (k6_xcmplx_0 X0 \\ & X1)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_int_1 X0) \wedge (v1_int_1 X1)) \Rightarrow (v1_int_1 \\ & (k6_xcmplx_0 X0 X1)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_int_1 X0) \wedge (v1_int_1 X1)) \Rightarrow (v1_int_1 \\ & (k3_xcmplx_0 X0 X1)) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_int_1 X0)\wedge(v1_int_1 X1))\Rightarrow(v7_ordinal1 (k2_int_2 X0 X1)) \quad (7)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(v1_int_1 X0) \quad (8)$$

Theorem 1

$$\begin{aligned} &\forall X0.(v1_int_1 X0)\Rightarrow(\forall X1.(v1_int_1 X1)\Rightarrow(\forall X2. \\ &(v1_int_1 X2)\Rightarrow(\forall X3.(v1_int_1 X3)\Rightarrow(((r1_int_2 X2 X3)\wedge \\ &(r2_int_1 X0 X1 X2)\wedge(r2_int_1 X0 X1 X3))\Rightarrow(r2_int_1 X0 X1 (k3_cxmplx_0 \\ &X2 X3)))))) \end{aligned}$$