

l53_int_4

(TMT8Y2YcZbfLJCB2UhjnJ88x8o9TJVxM5xL)

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

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

Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v1_int_1 X2) \Rightarrow (((r1_int_1 X0 (k3_xcmplx_0 X1 X2)) \wedge (r1_int_2 X1 \\ & X0)) \Rightarrow (r1_int_1 X0 X2)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow ((r1_int_1 \\ & X0 X1) \Leftrightarrow (\exists X2.(v1_int_1 X2) \wedge (X1 = k3_xcmplx_0 X0 X2)))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v1_int_1 X2) \Rightarrow (((r1_int_1 X0 X1) \wedge ((r1_int_1 X2 X1) \wedge (r1_int_2 \\ & X0 X2))) \Rightarrow (r1_int_1 (k3_xcmplx_0 X0 X2) X1)))))) \end{aligned}$$