

t22_int_1

(TMGDa9P39YbZMW9SLiKKJENb8BNq9THFL5t)

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Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $r2_int_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v1_int_1 X2) \Rightarrow ((r2_int_1 X0 X1 X2) \Leftrightarrow (r2_int_1 (k2_xcmplx_0 X0 X2) \\ & X1 X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v1_int_1 X2) \Rightarrow (\forall X3.(v1_int_1 X3) \Rightarrow ((r2_int_1 (k2_xcmplx_0 \\ & X0 X1) X2 X3) \Leftrightarrow (r2_int_1 X0 (k6_xcmplx_0 X2 X1) X3)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v1_int_1 X2) \Rightarrow ((r2_int_1 X0 X1 X2) \Rightarrow (r2_int_1 X1 X0 X2)))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_int_1 X0) \wedge (v1_int_1 X1)) \Rightarrow (v1_int_1 \\ & (k6_xcmplx_0 X0 X1)) \end{aligned} \tag{4}$$

Theorem 1

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