

t17_metric_3

(TMXKZ1JnyoLboiwknnKoQVcDCrAKXv23XMP)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_square_1 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\
 & (v1_xreal_0 X2) \Rightarrow (\forall X3.(v1_xreal_0 X3) \Rightarrow (\forall X4.(v1_xreal_0 \\
 & X4) \Rightarrow (\forall X5.(v1_xreal_0 X5) \Rightarrow (r1_xxreal_0 (k3_square_1 (\\
 & k2_xcmplx_0 (k2_xcmplx_0 (k3_xcmplx_0 X0 X1) (k3_xcmplx_0 X2 X3)) \\
 & (k3_xcmplx_0 X4 X5))) (k3_xcmplx_0 (k2_xcmplx_0 (k2_xcmplx_0 \\
 & (k3_square_1 X0) (k3_square_1 X2)) (k3_square_1 X4)) (k2_xcmplx_0 \\
 & (k2_xcmplx_0 (k3_square_1 X1) (k3_square_1 X3)) (k3_square_1 \\
 & X5))))))))))
 \end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned}
 & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\
 & (v1_xreal_0 X2) \Rightarrow (\forall X3.(v1_xreal_0 X3) \Rightarrow (\forall X4.(v1_xreal_0 \\
 & X4) \Rightarrow (\forall X5.(v1_xreal_0 X5) \Rightarrow (r1_xxreal_0 (k3_square_1 (\\
 & k2_xcmplx_0 (k2_xcmplx_0 (k3_xcmplx_0 X0 X2) (k3_xcmplx_0 X1 X3)) \\
 & (k3_xcmplx_0 X4 X5))) (k3_xcmplx_0 (k2_xcmplx_0 (k2_xcmplx_0 \\
 & (k3_square_1 X0) (k3_square_1 X1)) (k3_square_1 X4)) (k2_xcmplx_0 \\
 & (k2_xcmplx_0 (k3_square_1 X2) (k3_square_1 X3)) (k3_square_1 \\
 & X5))))))))))
 \end{aligned}$$