

t11_dist_1

(TMc1CnTaYz1FrSqFGVdkeCcVgLYm1qUa6sg)

October 27, 2020

Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_dist_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_dist_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_dist_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_finset_1 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 X0) \Rightarrow \\ & (\forall X2.(m2_finseq_1 X2 X0) \Rightarrow ((r1_dist_1 X0 X1 X2) \Leftrightarrow (X2 \in k5_dist_1 \\ & \quad X0 X1)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_finset_1 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 X0) \Rightarrow \\ & (\forall X2.(m2_finseq_1 X2 X0) \Rightarrow ((r1_dist_1 X0 X1 X2) \Leftrightarrow (k4_dist_1 \\ & \quad X0 X1 = k4_dist_1 X0 X2)))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_finset_1 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 X0) \Rightarrow \\ & (\forall X2.(m2_finseq_1 X2 X0) \Rightarrow ((X2 \in k5_dist_1 X0 X1) \Rightarrow (k4_dist_1 \\ & \quad X0 X1 = k4_dist_1 X0 X2)))) \end{aligned}$$