

t29_metric_2

(TMPs9myM6UWhYP4TNmEpoWAeLzWDLZBbKf3)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v6_metric_1 : \iota \Rightarrow o$ be given. Let $v8_metric_1 : \iota \Rightarrow o$ be given. Let $v9_metric_1 : \iota \Rightarrow o$ be given. Let $l1_metric_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_metric_2 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k9_metric_2 : \iota \Rightarrow \iota$ be given. Let $k4_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r4_metric_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_metric_1 X0)) \Rightarrow (k9_metric_2 \\ & X0 = ReplSep (toset (\lambda X1 : \iota. m1_subset_1 X1 (k3_zfmisc_1 (k2_metric_2 \\ & X0) (k2_metric_2 X0) k1_numbers))) (\lambda X1 : \iota. \exists X2. (m1_subset_1 \\ & X2 (k2_metric_2 X0)) \wedge (\exists X3. (m1_subset_1 X3 (k2_metric_2 \\ & X0)) \wedge (\exists X4. (m1_subset_1 X4 k1_numbers) \wedge ((X1 = k4_domain_1 \\ & (k2_metric_2 X0) (k2_metric_2 X0) k1_numbers X2 X3 X4) \wedge (r4_metric_2 \\ & X0 X2 X3 X4)))))) (\lambda X1 : \iota. X1)) \end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v6_metric_1 X0) \wedge ((v8_metric_1 \\ & X0) \wedge ((v9_metric_1 X0) \wedge (l1_metric_1 X0))))) \Rightarrow (\forall X1. (m1_subset_1 \\ & X1 (k3_zfmisc_1 (k2_metric_2 X0) (k2_metric_2 X0) k1_numbers)) \Rightarrow \\ & ((X1 \in k9_metric_2 X0) \Leftrightarrow (\exists X2. (m1_subset_1 X2 (k2_metric_2 \\ & X0)) \wedge (\exists X3. (m1_subset_1 X3 (k2_metric_2 X0)) \wedge (\exists X4. \\ & (m1_subset_1 X4 k1_numbers) \wedge ((X1 = k4_domain_1 (k2_metric_2 X0) \\ & (k2_metric_2 X0) k1_numbers X2 X3 X4) \wedge (r4_metric_2 X0 X2 X3 X4))))))) \end{aligned}$$