

t7_knaster

(TMRvbyNrASiVaRqU8VYrn4B6JrJmqm1Bpsi)

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Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $v6_cohsp_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_knaster : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (r1_tarski X0 (k3_tarski X1)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 (k9_setfam_1 \\ & X0) (k9_setfam_1 X0)) \wedge ((v6_cohsp_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 (k9_setfam_1 X0) (k9_setfam_1 X0)))))) \Rightarrow (k2_knaster \\ & X0 X1 = k3_tarski (ReplSep (toset (\lambda X2 : \iota. m1_subset_1 X2 (k1_zfmisc_1 \\ & X0))) (\lambda X2 : \iota. r1_tarski X2 (k3_funct_2 (k1_zfmisc_1 X0) (\\ & k9_setfam_1 X0) X1 X2)) (\lambda X2 : \iota. X2)))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 (k9_setfam_1 \\ & X0) (k9_setfam_1 X0)) \wedge ((v6_cohsp_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 (k9_setfam_1 X0) (k9_setfam_1 X0)))))) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (k1_zfmisc_1 X0)) \Rightarrow ((r1_tarski X2 (k3_funct_2 \\ & (k1_zfmisc_1 X0) (k9_setfam_1 X0) X1 X2)) \Rightarrow (r1_tarski X2 (k2_knaster \\ & X0 X1)))) \end{aligned}$$