

t28_borsuk_7

(TMNRLt1d2c1NbvjSTEEi8CspyvTSbcWxPuJ)

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Let $v1_xcmplx.0 : \iota \Rightarrow o$ be given. Let $r1_zfmisc.1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_borsuk.7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_funcop.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_funct.4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat.1 : \iota \Rightarrow o$ be given. Let $v1_funct.1 : \iota \Rightarrow o$ be given. Let $k9_xtuple.0 : \iota \Rightarrow \iota$ be given. Let $k1_funct.4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_funcop.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. k1_funct.1 (k16_funcop.1 X0 X1) X0 = X1 \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((X0 \neq X1) \Rightarrow (k1_funct.1 \\ & (k4_funct.4 X0 X1 X2 X3) X0 = X2)) \wedge (k1_funct.1 (k4_funct.4 X0 X1 X2 \\ & X3) X1 = X3) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_relat.1 X1) \wedge (v1_funct.1 X1)) \Rightarrow (\forall X2. \\ & ((v1_relat.1 X2) \wedge (v1_funct.1 X2)) \Rightarrow ((X0 \in k9_xtuple.0 X1) \Rightarrow (k1_funct.1 \\ & (k1_funct.4 X2 X1) X0 = k1_funct.1 X1 X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_relat.1 X1) \wedge (v1_funct.1 X1)) \Rightarrow (\forall X2. \\ & ((v1_relat.1 X2) \wedge (v1_funct.1 X2)) \Rightarrow ((\neg X0 \in k9_xtuple.0 X1) \Rightarrow (k1_funct.1 \\ & (k1_funct.4 X2 X1) X0 = k1_funct.1 X2 X0))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. (v1_relat.1 (k4_funct.4 X0 X1 X2 X3)) \wedge (v1_funct.1 (k4_funct.4 X0 X1 X2 X3)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat.1 (k16_funcop.1 X0 X1)) \wedge (v1_funct.1 (k16_funcop.1 X0 X1)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.k16_funcop_1 X0 X1 = k7_funcop_1 (k1_tarski X0) X1 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(r1_zfmisc_1 X0 X1 X2) \Leftrightarrow ((X0 \neq X1) \wedge ((X0 \neq X2) \wedge (X1 \neq X2))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.k4_funct_4 X0 X1 X2 X3 = k1_funct_4 (k16_funcop_1 X0 X2) (k16_funcop_1 X1 X3) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. k1_borsuk_7 X0 X1 X2 X3 X4 X5 = k1_funct_4 (k4_funct_4 X0 X1 X3 X4) (k16_funcop_1 X2 X5) \quad (10)$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. (v1_xcmplx_0 X5) \Rightarrow ((r1_zfmisc_1 X0 X1 X5) \Rightarrow ((k1_funct_1 (k1_borsuk_7 X0 X1 X5 X2 X3 X4) X0 = X2) \wedge ((k1_funct_1 (k1_borsuk_7 X0 X1 X5 X2 X3 X4) X1 = X3) \wedge (k1_funct_1 (k1_borsuk_7 X0 X1 X5 X2 X3 X4) X5 = X4))))$$