

t25_borsuk_7

(TMRdT4qB9GjrxZemLcgHiaZTy9aPp393i2a)

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Let $k1_borsuk_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_funct_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k1_funct_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. k4_funct_4 X0 X0 X1 X2 = k16_funcop_1 X0 X2 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. (X0 \neq X2) \Rightarrow (k4_funct_4 X0 X2 X1 X3 = k2_tarski (k4_tarski X0 X1) (k4_tarski X2 X3)) \quad (2)$$

Assume the following.

$$\forall X0. k2_tarski X0 X0 = k1_tarski X0 \quad (3)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (\forall X2. ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow (k1_funct_4 (k1_funct_4 X0 X1) X2 = k1_funct_4 X0 (k1_funct_4 X1 X2)))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 (k16_funcop_1 X0 X1)) \wedge (v1_funct_1 (k16_funcop_1 X0 X1)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. k16_funcop_1 X0 X1 = k7_funcop_1 (k1_tarski X0) X1 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.k4_funct_4 X0 X1 X2 \\ X3 = k1_funct_4 (k16_funcop_1 X0 X2) (k16_funcop_1 X1 X3) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ k1_borsuk_7 X0 X1 X2 X3 X4 X5 = k1_funct_4 (k4_funct_4 X0 X1 X3 X4) (\\ k16_funcop_1 X2 X5) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.k2_tarSKI X0 X1 = k2_tarSKI X1 X0 \quad (9)$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.(X0 \neq X1) \Rightarrow \\ (k1_borsuk_7 X0 X1 X0 X2 X3 X4 = k4_funct_4 X0 X1 X4 X3)$$