

t33_borsuk_7

(TMX9rkK7rXa7ZWqzY1W84x5ypcuUzX2BrAf)

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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 $k1_borsuk_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_card_3 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(v1_xcmplx_0 X2) \Rightarrow (\forall X3. \\ & \quad \forall X4.\forall X5.\forall X6.\forall X7.\forall X8.((r1_tarski \\ & \quad X3 X4) \wedge ((r1_tarski X5 X6) \wedge (r1_tarski X7 X8))) \Rightarrow (r1_tarski (k4_card_3 \\ & (k1_borsuk_7 X0 X1 X2 X3 X5 X7)) (k4_card_3 (k1_borsuk_7 X0 X1 X2 X4 \\ & \quad X6 X8)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski (k1_tarski X0) X1) \Leftrightarrow (X0 \in X1) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ & (v1_xcmplx_0 X5) \Rightarrow ((r1_zfmisc_1 X0 X1 X5) \Rightarrow (k4_card_3 (k1_borsuk_7 \\ & X0 X1 X5 (k1_tarski X2) (k1_tarski X3) (k1_tarski X4)) = k1_tarski \\ & \quad (k1_borsuk_7 X0 X1 X5 X2 X3 X4))) \end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ & \quad \forall X6.\forall X7.\forall X8.(v1_xcmplx_0 X8) \Rightarrow (((r1_zfmisc_1 \\ & X0 X1 X8) \wedge ((X2 \in X3) \wedge ((X4 \in X5) \wedge (X6 \in X7)))) \Rightarrow (k1_borsuk_7 X0 X1 X8 \\ & \quad X2 X4 X6 \in k4_card_3 (k1_borsuk_7 X0 X1 X8 X3 X5 X7))) \end{aligned}$$