

t47_borsuk.5 (TMVyPKrT-
GKPyhKoY3JEbPaqsS9dp6wVCkDT)

October 27, 2020

Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k4_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_0 : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k3_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow ((X0 \in k3_xxreal_1 X1 X2) \Leftrightarrow ((\neg r1_xxreal_0 X0 X1) \wedge \\ & (r1_xxreal_0 X0 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\neg \forall X1.(v1_xreal_0 X1) \Rightarrow (r1_xxreal_0 X1 X0)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow (k4_rcomp_1 X0 X1 = k3_xxreal_1 X0 X1) \tag{3}$$

Assume the following.

$$v1_xxreal_0 k2_xxreal_0 \tag{4}$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Leftrightarrow (X0 \in k1_numbers) \tag{5}$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \tag{6}$$

Theorem 1 $\forall X0.(v1_xreal_0 X0) \Rightarrow (k4_rcomp_1 k2_xxreal_0 X0 \neq k1_numbers)$.