

t228_xxreal_1

(TMNzZJPjeDBnbpKX49yEU8S8Libdj3oF7ea)

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Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (v1_xxreal_0 X1) \Rightarrow (\forall X2. (v1_xxreal_0 X2) \Rightarrow (\neg (X0 \in k1_xxreal_1 X1 X2) \wedge (\neg X0 \in k3_xxreal_1 X1 X2) \wedge (X0 \neq X1)))) \quad (1)$$

Assume the following.

$$\forall X0. (v1_xxreal_0 X0) \Rightarrow (\forall X1. (v1_xxreal_0 X1) \Rightarrow ((X0 \in k1_numbers) \Rightarrow (r1_tarski (k3_xxreal_1 X1 X0) k1_numbers))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (3)$$

Theorem 1

$$\forall X0. (v1_xxreal_0 X0) \Rightarrow (\forall X1. (v1_xxreal_0 X1) \Rightarrow ((X0 \in k1_numbers) \wedge (X1 \in k1_numbers) \Rightarrow (r1_tarski (k1_xxreal_1 X0 X1) k1_numbers))))$$