

l8_jordan1h

(TMSdugif1do9qznyWpT1L8c8f13SEzk3qLC)

October 27, 2020

Let $r8_relat_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_jordan1h : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.(m1_subset_1 X1 k1_numbers) \Rightarrow ((k4_tarski X0 X1 \in k1_jordan1h) \Rightarrow (r1_xxreal_0 X0 X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2.(v1_xxreal_0 X2) \Rightarrow (((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X2)) \Rightarrow (r1_xxreal_0 X0 X2)))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (3)$$

Assume the following.

$$m1_subset_1 k1_jordan1h (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)) \quad (4)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(r8_relat_2 X0 X1) \Leftrightarrow (\forall X2.\forall X3.\forall X4.((X2 \in X1) \wedge ((X3 \in X1) \wedge ((X4 \in X1) \wedge ((k4_tarski X2 X3 \in X0) \wedge (k4_tarski X3 X4 \in X0)))))) \Rightarrow (k4_tarski X2 X4 \in X0))) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.k4_tarski X0 X1 = k2_tarski (k2_tarski X0 X1) (k1_tarski X0) \quad (6)$$

Assume the following.

$$\begin{aligned}
k1_jordan1h = & \text{ReplSep2 } (\text{toset } (\lambda X0 : \iota.m1_subset_1 X0 k1_numbers)) \\
& (\lambda X0 : \iota.\text{toset } (\lambda X1 : \iota.m1_subset_1 X1 k1_numbers)) (\\
& \lambda X0 : \iota.\lambda X1 : \iota.r1_xxreal_0 X0 X1) (\lambda X0 : \iota.\lambda X1 : \\
& \iota.k4_tarski X0 X1)
\end{aligned} \tag{7}$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \tag{8}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \tag{9}$$

Assume the following.

$$\begin{aligned}
\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc.1 \\
(k2_zfmisc.1 X0 X1))) \Rightarrow (v1_relat.1 X2)
\end{aligned} \tag{10}$$

Theorem 1 $r8_relat.2 k1_jordan1h k1_numbers$.