

# l9\_jordan1h

(TMXsUiJhmLgPeocvDxpdt9g8EFQaAsgfEza)

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Let  $r6\_relat\_2 : \iota \Rightarrow \iota \Rightarrow o$  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  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1\_subset\_1 X0 X1) \quad (1)$$

Assume the following.

$$m1\_subset\_1 k1\_jordan1h (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers k1\_numbers)) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v1\_relat\_1 X0) \Rightarrow (\forall X1. (r6\_relat\_2 X0 X1) \Leftrightarrow (\forall X2. \\ & \forall X3. \neg (X2 \in X1) \wedge ((X3 \in X1) \wedge ((X2 \neq X3) \wedge ((\neg k4\_tarski X2 X3 \in X0) \wedge \\ & (\neg k4\_tarski X3 X2 \in X0)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. k4\_tarski X0 X1 = k2\_tarski (k2\_tarski X0 X1) (k1\_tarski X0) \quad (4)$$

Assume the following.

$$\begin{aligned} k1\_jordan1h = & ReplSep2 (toset (\lambda X0 : \iota. m1\_subset\_1 X0 k1\_numbers)) \\ & (\lambda X0 : \iota. toset (\lambda X1 : \iota. m1\_subset\_1 X1 k1\_numbers)) ( \\ & \lambda X0 : \iota. \lambda X1 : \iota. r1\_xxreal\_0 X0 X1) (\lambda X0 : \iota. \lambda X1 : \\ & \iota. k4\_tarski X0 X1) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_xxreal\_0 X0) \wedge (v1\_xxreal\_0 X1)) \Rightarrow (r1\_xxreal\_0 X0 X1) \vee (r1\_xxreal\_0 X1 X0) \quad (6)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0)\Rightarrow(v1\_xxreal\_0 X0) \quad (7)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers)\Rightarrow(v1\_xreal\_0 X0) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))\Rightarrow(v1\_relat\_1 X2) \quad (9)$$

**Theorem 1**  $r6\_relat\_2 k1\_jordan1h k1\_numbers$ .