

t19\_jordan5a

(TMR7E334SqPwMVN4PzMuj8JPPfhabNk2n8m)

October 27, 2020

Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_seq\_4 : \iota \Rightarrow \iota$  be given. Let  $k1\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_seq\_4 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v2\_measure5 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 k1\_numbers) \Rightarrow (\forall X2.((\neg v1\_xboole\_0 X2) \wedge ((v2\_measure5 \\ & X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 k1\_numbers)))) \Rightarrow ((X2 = k1\_rcomp\_1 \\ & X0 X1) \Rightarrow ((k4\_seq\_4 X2 = X1) \wedge (k5\_seq\_4 X2 = X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1 X0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_numbers)) \Rightarrow (((\neg v1\_xboole\_0 \\ & X0) \wedge (v2\_measure5 X0)) \Leftrightarrow (\exists X1.(m1\_subset\_1 X1 k1\_numbers) \wedge \\ & (\exists X2.(m1\_subset\_1 X2 k1\_numbers) \wedge ((r1\_xxreal\_0 X1 X2) \wedge \\ & (X0 = k1\_rcomp\_1 X1 X2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0 X0) \wedge (v1\_xreal\_0 X1)) \Rightarrow (m1\_subset\_1 (k1\_rcomp\_1 X0 X1) (k1\_zfmisc\_1 k1\_numbers)) \quad (4)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Leftrightarrow (X0 \in k1\_numbers) \quad (5)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (v1\_xreal\_0 X0) \quad (6)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow ((r1\_xxreal\_0 \\ & X0 X1) \Rightarrow ((k5\_seq\_4 (k1\_rcomp\_1 X0 X1) = X0) \wedge (k4\_seq\_4 (k1\_rcomp\_1 \\ & X0 X1) = X1)))) \end{aligned}$$