

## t25\_jordan18

(TMSu1uzjE11K2Ky5S7LWh1S8XmJSFVNQ6E1)

October 27, 2020

Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k15\_euclid : \iota \Rightarrow \iota$  be given. Let  $r1\_jordan18 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid X0)))) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (u1\_struct\_0 (k15\_euclid X0))) \Rightarrow (\forall X3.( \\ & m1\_subset\_1 X3 (u1\_struct\_0 (k15\_euclid X0))) \Rightarrow ((r1\_topreal1 \\ & (k15\_euclid X0) X2 X3 X1) \Rightarrow (r1\_topreal1 (k15\_euclid X0) X3 X2 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid X0)))) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (u1\_struct\_0 (k15\_euclid X0))) \Rightarrow (\forall X3.( \\ & m1\_subset\_1 X3 (u1\_struct\_0 (k15\_euclid X0))) \Rightarrow (\forall X4.(m1\_subset\_1 \\ & X4 (u1\_struct\_0 (k15\_euclid X0))) \Rightarrow (\forall X5.(m1\_subset\_1 X5 \\ & (u1\_struct\_0 (k15\_euclid X0))) \Rightarrow ((r1\_jordan18 X0 X1 X2 X3 X4 X5) \Leftrightarrow \\ & (\forall X6.(m1\_subset\_1 X6 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid \\ & X0)))) \Rightarrow (\neg(r1\_topreal1 (k15\_euclid X0) X2 X3 X6) \wedge ((r1\_tarski X6 \\ & X1) \wedge (r1\_xboole\_0 X6 (k2\_tarski X4 X5)))))))))) \end{aligned} \quad (2)$$

### Theorem 1

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid X0)))) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (u1\_struct\_0 (k15\_euclid X0))) \Rightarrow (\forall X3.( \\ & m1\_subset\_1 X3 (u1\_struct\_0 (k15\_euclid X0))) \Rightarrow (\forall X4.(m1\_subset\_1 \\ & X4 (u1\_struct\_0 (k15\_euclid X0))) \Rightarrow (\forall X5.(m1\_subset\_1 X5 \\ & (u1\_struct\_0 (k15\_euclid X0))) \Rightarrow ((r1\_jordan18 X0 X1 X2 X3 X4 X5) \Rightarrow \\ & (r1\_jordan18 X0 X1 X3 X2 X4 X5)))))) \end{aligned}$$