

# t16\_jordan1k (TM- RWp6DiHhFmiYB6QyVwZodr6ohWgDA5G3S)

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Let  $m1\_subset.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k1\_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_struct.0 : \iota \Rightarrow \iota$  be given. Let  $k15\_euclid : \iota \Rightarrow \iota$  be given. Let  $k1\_struct.0 : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole.0 : \iota \Rightarrow o$  be given. Let  $k1\_xboole.0 : \iota$  be given. Let  $k1\_zfmisc.1 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_xboole.0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m2\_subset.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $u1\_struct.0 : \iota \Rightarrow \iota$  be given. Let  $k3\_subset.1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k2\_zfmisc.1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_relat.1 : \iota \Rightarrow o$  be given. Let  $v4\_relat.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v5\_relat.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_funct.1 : \iota \Rightarrow o$  be given. Let  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_funct.2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_valued.0 : \iota \Rightarrow o$  be given. Let  $v2\_valued.0 : \iota \Rightarrow o$  be given. Let  $v3\_valued.0 : \iota \Rightarrow o$  be given. Let  $v4\_valued.0 : \iota \Rightarrow o$  be given. Let  $v5\_valued.0 : \iota \Rightarrow o$  be given. Let  $v6\_membered : \iota \Rightarrow o$  be given. Let  $l1\_struct.0 : \iota \Rightarrow o$  be given. Let  $l1\_rltopsp1 : \iota \Rightarrow o$  be given. Let  $l1\_rlvect.1 : \iota \Rightarrow o$  be given. Let  $l1\_pre_topc : \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v5\_rltopsp1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_xboole.0 X0) \Rightarrow (X0 = k1\_xboole.0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\neg(X0 \in X1) \wedge ((m1\_subset.1 X1 (k1\_zfmisc.1 X2)) \wedge (v1\_xboole.0 X2)) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset.1 X0 (k1\_zfmisc.1 X1)) \Leftrightarrow (r1\_tarski X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.k4\_xboole.0 X0 k1\_xboole.0 = X0 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(k4\_xboole.0 X0 X1 = k1\_xboole.0) \Leftrightarrow (r1\_tarski X0 X1) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X0 X1)\Rightarrow((v1\_xboole\_0 X1)\vee (X0 \in X1)) \quad (6)$$

Assume the following.

$$\forall X0.(m2\_subset\_1 X0 k1\_numbers k5\_numbers)\Rightarrow(\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid X0))))\Rightarrow (r1\_tarski (k1\_jordan2c X0 X1) (k3\_subset\_1 (u1\_struct\_0 (k15\_euclid X0)) X1))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski X0 X0 \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0 X0)\wedge((\neg v1\_xboole\_0 X1)\wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0))))\Rightarrow(\forall X2.(m2\_subset\_1 X2 X0 X1)\Leftrightarrow(m1\_subset\_1 X2 X1)) \quad (9)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (10)$$

Assume the following.

$$\exists X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k5\_numbers)))\wedge((\neg v1\_xboole\_0 X0)\wedge((v1\_relat\_1 X0)\wedge((v4\_relat\_1 X0 k5\_numbers)\wedge((v5\_relat\_1 X0 k5\_numbers)\wedge((v1\_funct\_1 X0)\wedge((v1\_partfun1 X0 k5\_numbers)\wedge((v1\_funct\_2 X0 k5\_numbers k5\_numbers)\wedge((v1\_valued\_0 X0)\wedge((v2\_valued\_0 X0)\wedge((v3\_valued\_0 X0)\wedge((v4\_valued\_0 X0)\wedge(v5\_valued\_0 X0)))))))))))))) \quad (11)$$

Assume the following.

$$v6\_membered k4\_ordinal1 \quad (12)$$

Assume the following.

$$\forall X0.(l1\_struct\_0 X0)\Rightarrow(v1\_xboole\_0 (k1\_struct\_0 X0)) \quad (13)$$

Assume the following.

$$\forall X0.(l1\_rltopsp1 X0)\Rightarrow((l1\_rlvect\_1 X0)\wedge(l1\_pre\_topc X0)) \quad (14)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc X0)\Rightarrow(l1\_struct\_0 X0) \quad (15)$$

Assume the following.

$$m1\_subset\_1 \ k5\_numbers \ (k1\_zfmisc\_1 \ k1\_numbers) \quad (16)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 \ X0) \Rightarrow ((v5\_rltopsp1 \ (k15\_euclid \ X0)) \wedge (l1\_rltopsp1 \ (k15\_euclid \ X0))) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 \ X1 \ (k1\_zfmisc\_1 \ X0)) \Rightarrow (k3\_subset\_1 \ X0 \ X1 = k4\_xboole\_0 \ X0 \ X1) \quad (18)$$

Assume the following.

$$\forall X0.(l1\_struct\_0 \ X0) \Rightarrow (k2\_struct\_0 \ X0 = u1\_struct\_0 \ X0) \quad (19)$$

Assume the following.

$$\forall X0.\forall X1.(v1\_xboole\_0 \ X0) \Rightarrow (\forall X2.(m1\_subset\_1 \ X2 \ (k1\_zfmisc\_1 \ (k2\_zfmisc\_1 \ X1 \ X0))) \Rightarrow (v1\_xboole\_0 \ X2)) \quad (20)$$

Assume the following.

$$\forall X0.(v6\_membered \ X0) \Rightarrow (\forall X1.(m1\_subset\_1 \ X1 \ X0) \Rightarrow (v7\_ordinal1 \ X1)) \quad (21)$$

**Theorem 1**

$$\forall X0.(m1\_subset\_1 \ X0 \ k5\_numbers) \Rightarrow (k1\_jordan2c \ X0 \ (k2\_struct\_0 \ (k15\_euclid \ X0)) = k1\_struct\_0 \ (k15\_euclid \ X0))$$