

t35\_mycielsk  
(TMaXxCBtasxESuZtQgp9tiq51Y2o7qsKWVx)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k2\_mycielsk : \iota \Rightarrow \iota$  be given. Let  $k5\_mycielsk : \iota \Rightarrow \iota$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_dilworth : \iota \Rightarrow \iota$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_dilworth : \iota \Rightarrow o$  be given. Let  $v1\_mycielsk : \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v8\_struct\_0 : \iota \Rightarrow o$  be given. Let  $k5\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $m1\_mycielsk : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow ((k1\_card\_1 X0 = k1\_card\_1 X1) \Rightarrow (X0 = X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (k1\_dilworth (k5\_mycielsk X0) = X0) \quad (2)$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow ((r1\_xxreal\_0 X0 X1) \wedge (r1\_xxreal\_0 X1 X0)) \Rightarrow (X0 = X1)) \quad (3)$$

Assume the following.

$$\forall X0.((v3\_dilworth X0) \wedge ((v1\_mycielsk X0) \wedge (l1\_orders\_2 X0))) \Rightarrow (r1\_xxreal\_0 (k1\_dilworth X0) (k2\_mycielsk X0)) \quad (4)$$

Assume the following.

$$\forall X0.((v8\_struct\_0 X0) \wedge (l1\_orders\_2 X0)) \Rightarrow (r1\_xxreal\_0 (k2\_mycielsk X0) (k5\_card\_1 (u1\_struct\_0 X0))) \quad (5)$$

Assume the following.

$$\forall X0.(v1\_finset\_1 X0) \Rightarrow (k5\_card\_1 X0 = k1\_card\_1 X0) \quad (6)$$

Assume the following.

$$\forall X0.k1\_card\_1 (k1\_card\_1 X0) = k1\_card\_1 X0 \quad (7)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(m1\_mycielsk X1 X0) \Rightarrow ((v1\_orders\_2 X1) \wedge (l1\_orders\_2 X1))) \quad (8)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (m1\_mycielsk (k5\_mycielsk X0) X0) \quad (9)$$

Assume the following.

$$\forall X0.(v1\_finset\_1 X0) \Rightarrow (m1\_subset\_1 (k5\_card\_1 X0) k4\_ordinal1) \quad (10)$$

Assume the following.

$$\forall X0.((v1\_mycielsk X0) \wedge (l1\_orders\_2 X0)) \Rightarrow (v7\_ordinal1 (k2\_mycielsk X0)) \quad (11)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.((v1\_orders\_2 X1) \wedge (l1\_orders\_2 X1)) \Rightarrow ((m1\_mycielsk X1 X0) \Leftrightarrow (u1\_struct\_0 X1 = X0))) \quad (12)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k4\_ordinal1) \Rightarrow (v7\_ordinal1 X0) \quad (13)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(m1\_mycielsk X1 X0) \Rightarrow (v8\_struct\_0 X1)) \quad (14)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (v1\_finset\_1 X0) \quad (15)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow ((v8\_struct\_0 X0) \Rightarrow (v3\_dilworth X0)) \quad (16)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (v1\_xxreal\_0 X0) \quad (17)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow ((v8\_struct\_0 X0) \Rightarrow (v1\_mycielsk X0)) \quad (18)$$

**Theorem 1**  $\forall X0.(v7\_ordinal1 X0) \Rightarrow (k2\_mycielsk (k5\_mycielsk X0) = X0)$ .