

l5_hurwitz

(TMLcC6nHYV48RhktPVbKum3YDANcdDNMHqM)

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Let $k4_complex1 : \iota \Rightarrow \iota$ be given. Let $k1_group_1 : \iota \Rightarrow \iota$ be given. Let $k1_complfld : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k4_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k6_complex1 : \iota$ be given. Let $k5_complex1 : \iota$ be given. Let $k3_complex1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k1_binop_2 : \iota \Rightarrow \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $np_0 : \iota$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $l5_algstr_0 : \iota \Rightarrow o$ be given. Let $l4_algstr_0 : \iota \Rightarrow o$ be given. Let $l4_struct_0 : \iota \Rightarrow o$ be given. Let $l3_struct_0 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ be given. Let $v36_algstr_0 : \iota \Rightarrow o$ be given. Assume the following.

$$k1_group_1 \ k1_complfld = k6_complex1 \quad (1)$$

Assume the following.

$$k4_struct_0 \ k1_complfld = k5_complex1 \quad (2)$$

Assume the following.

$$(k3_complex1 \ k6_complex1 = np_1) \wedge (k4_complex1 \ k6_complex1 = k6_numbers) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xboole_0 \ X0) \Rightarrow (X0 = k1_xboole_0) \quad (4)$$

Assume the following.

$$(k3_complex1 \ k6_numbers = k6_numbers) \wedge (k4_complex1 \ k6_numbers = k6_numbers) \quad (5)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (u1_struct_0 k1_complfld)) \Rightarrow (\forall X1. (v1_xcmplx_0 X1) \Rightarrow ((X0 = X1) \Rightarrow (k4_algstr_0 k1_complfld X0 = k1_binop_2 X1))) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow ((k3_complex1 (k4_xcmplx_0 X0) = k1_real_1 (k3_complex1 X0)) \wedge (k4_complex1 (k4_xcmplx_0 X0) = k1_real_1 (k4_complex1 X0))) \quad (7)$$

Assume the following.

$$((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \quad (8)$$

Assume the following.

$$(m2_subset_1 np_0 k1_numbers k5_numbers) \wedge ((m1_subset_1 np_0 k5_numbers) \wedge (m1_subset_1 np_0 k1_numbers)) \quad (9)$$

Assume the following.

$$v1_xboole_0 np_0 \quad (10)$$

Assume the following.

$$k4_xcmplx_0 np_0 = np_0 \quad (11)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (12)$$

Assume the following.

$$k5_complex1 = k1_xboole_0 \quad (13)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (k1_real_1 X0 = k4_xcmplx_0 X0) \quad (14)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k1_binop_2 X0 = k4_xcmplx_0 X0) \quad (15)$$

Assume the following.

$$\forall X0.(l6_algstr_0 X0) \Rightarrow ((l2_algstr_0 X0) \wedge (l5_algstr_0 X0)) \quad (16)$$

Assume the following.

$$\forall X0.(l5_algstr_0 X0) \Rightarrow ((l4_algstr_0 X0) \wedge (l4_struct_0 X0)) \quad (17)$$

Assume the following.

$$\forall X0.(l4_algstr_0 X0) \Rightarrow ((l3_struct_0 X0) \wedge (l3_algstr_0 X0)) \quad (18)$$

Assume the following.

$$\forall X0.(l3_algstr_0 X0) \Rightarrow (m1_subset_1 (k1_group_1 X0) (u1_struct_0 X0)) \quad (19)$$

Assume the following.

$$(v36_algstr_0 k1_complfld) \wedge (l6_algstr_0 k1_complfld) \quad (20)$$

Assume the following.

$$k6_complex1 = np_1 \quad (21)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xcmplx_0 X0) \quad (22)$$

Theorem 1

$$(k4_complex1 (k1_group_1 k1_complfld) = k6_numbers) \wedge ((k4_complex1 (k4_algstr_0 k1_complfld (k1_group_1 k1_complfld)) = k6_numbers) \wedge (k4_complex1 (k4_struct_0 k1_complfld) = k6_numbers))$$