

t2_menelaus

(TMWvA8on2Tj5qg2dWRnrTAHy8VLEiGVL59p)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k1_rlvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k8_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1 X0 k1_numbers) \wedge (v1_xreal_0 X1)) \Rightarrow (k8_real_1 X0 X1 = k3_xcmplx_0 X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow (k11_binop_2 X0 X1 = k3_xcmplx_0 X0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1. (m1_subset_1 \\ X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow ((k17_euclid (k1_rlvect_1 \\ (k15_euclid np_2) X1 X0) = k8_real_1 X0 (k17_euclid X1)) \wedge (k18_euclid \\ (k1_rlvect_1 (k15_euclid np_2) X1 X0) = k8_real_1 X0 (k18_euclid \\ X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (m1_subset_1 (k18_euclid X0) k1_numbers) \quad (4)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (m1_subset_1 (k17_euclid X0) k1_numbers) \quad (5)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 k1_numbers) \Rightarrow ((k17_euclid (k1_rlvect_1 \\ & (k15_euclid np_2) X0 X1) = k11_binop_2 X1 (k17_euclid X0)) \wedge (k18_euclid \\ & (k1_rlvect_1 (k15_euclid np_2) X0 X1) = k11_binop_2 X1 (k18_euclid \\ & X0)))) \end{aligned}$$