

# l14\_euclid\_6

(TMTAwi9a9fkj9GSiNcU563RJBm3UL2RrVej)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_numbers : \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k9\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_comptrig : \iota \Rightarrow \iota$  be given. Let  $k3\_complex2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_complex2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_real\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k8\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $k32\_sin\_cos : \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k2\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 k2\_numbers) \Rightarrow ((r1\_xxreal\_0 k6\_numbers (k9\_real\_1 (k1\_comptrig \\ & X1) (k1\_comptrig X0))) \Rightarrow ((X1 = k6\_numbers) \vee (k1\_comptrig (k2\_complex2 \\ & X1 (k1\_real\_1 (k1\_comptrig X0))) = k9\_real\_1 (k1\_comptrig X1) ( \\ & k1\_comptrig X0)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (( \\ & (\neg(k1\_comptrig X0 \neq k6\_numbers) \wedge (X1 = k6\_numbers)) \Rightarrow (k3\_complex2 \\ & X0 X1 = k1\_comptrig (k2\_complex2 X1 (k1\_real\_1 (k1\_comptrig X0)))))) \wedge \\ & (\neg(k1\_comptrig X0 \neq k6\_numbers) \wedge ((X1 = k6\_numbers) \wedge (k3\_complex2 \\ & X0 X1 \neq k9\_real\_1 (k8\_real\_1 np\_2 k32\_sin\_cos) (k1\_comptrig X0)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k2\_numbers) \Rightarrow (v1\_xcmplx\_0 X0) \tag{3}$$

## Theorem 1

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k2\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 k2\_numbers) \Rightarrow ((r1\_xxreal\_0 k6\_numbers (k9\_real\_1 (k1\_comptrig \\ & X1) (k1\_comptrig X0))) \Rightarrow ((X1 = k6\_numbers) \vee (k3\_complex2 X0 X1 = \\ & k9\_real\_1 (k1\_comptrig X1) (k1\_comptrig X0)))))) \end{aligned}$$