

# t2\_euclid\_3 (TMPP- SPkX3CCesuJgXq1iubzxpaxzuGLVwER)

October 27, 2020

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  $k1\_euclid\_3 : \iota \Rightarrow \iota$  be given. Let  $k2\_euclid\_3 : \iota \Rightarrow \iota$  be given. Let  $k19\_euclid : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k17\_euclid : \iota \Rightarrow \iota$  be given. Let  $k18\_euclid : \iota \Rightarrow \iota$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $k3\_complex1 : \iota \Rightarrow \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_complex1 : \iota$  be given. Let  $k4\_complex1 : \iota \Rightarrow \iota$  be given. Let  $v1\_membered : \iota \Rightarrow o$  be given. Let  $k2\_numbers : \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\ (X0 = k19\_euclid (k17\_euclid X0) (k18\_euclid X0)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow ((k3\_complex1 \\ (k2\_xcmplx\_0 X0 (k3\_xcmplx\_0 X1 k7\_complex1)) = X0) \wedge (k4\_complex1 \\ (k2\_xcmplx\_0 X0 (k3\_xcmplx\_0 X1 k7\_complex1)) = X1))) \end{aligned} \quad (2)$$

Assume the following.

$$v1\_membered k2\_numbers \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\ (m1\_subset\_1 (k2\_euclid\_3 X0) k2\_numbers) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\ (m1\_subset\_1 (k18\_euclid X0) k1\_numbers) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\ (m1\_subset\_1 (k17\_euclid X0) k1\_numbers) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\ (k2\_euclid\_3 X0 = k2\_xcmplx\_0 (k17\_euclid X0) (k3\_xcmplx\_0 (k18\_euclid \\ X0) k7\_complex1)) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (k1\_euclid\_3 X0 = k19\_euclid (k3\_complex1 X0) (k4\_complex1 X0)) \quad (8)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (v1\_xreal\_0 X0) \quad (9)$$

Assume the following.

$$\forall X0.(v1\_membered X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 X0) \Rightarrow (v1\_xcmplx\_0 X1)) \quad (10)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\ (k1\_euclid\_3 (k2\_euclid\_3 X0) = X0) \end{aligned}$$