

# t46\_euclid\_4 (TMdktRcY- Gax4tUZfJpAhgXzMBXso8LSyM8D)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. 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  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $v2\_euclid\_4 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1 \\ (u1\_struct\_0\ (k15\_euclid\ X0)))) \Rightarrow (\neg(v2\_euclid\_4\ X1\ X0) \wedge (\forall X2. \\ (m1\_subset\_1\ X2\ (u1\_struct\_0\ (k15\_euclid\ X0)))) \Rightarrow (\forall X3.( \\ m1\_subset\_1\ X3\ (u1\_struct\_0\ (k15\_euclid\ X0)))) \Rightarrow (\neg(X2 \in X1) \wedge ((X3 \in \\ X1) \wedge (X2 \neq X3)))))) \end{aligned} \tag{1}$$

## Theorem 1

$$\begin{aligned} \forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0 \\ (k15\_euclid\ X0))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ ( \\ u1\_struct\_0\ (k15\_euclid\ X0)))) \Rightarrow (\neg(v2\_euclid\_4\ X2\ X0) \wedge (\forall X3. \\ (m1\_subset\_1\ X3\ (u1\_struct\_0\ (k15\_euclid\ X0)))) \Rightarrow (\neg(X1 \neq X3) \wedge (X3 \in \\ X2)))))) \end{aligned}$$