t46_euclid_8 (TMbcEAcnNn66yDdwjZeEpiRfCmNfRw5kEZk)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k8\_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_3 : \iota$ be given. Let $k1\_euclid\_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_euclid\_8 : \iota$ be given. Let $k10\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_euclid\_8 : \iota$ be given. Let $k4\_euclid\_8 : \iota$ be given. Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k1\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ k1\_numbers) \Rightarrow (k1\_euclid\_8\ X0\ X1\ X2 = k7\_euclid\ np\_\_3\ (k7\_euclid\ np\_\_3\ (k9\_euclid\ np\_\_3\ k2\_euclid\_8\ X0)\ (k9\_euclid\ np\_\_3\ k3\_euclid\_8\ X1))\ (k9\_euclid\ np\_\_3\ k4\_euclid\_8\ X2)))) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k1\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ k1\_numbers) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ k1\_numbers) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ k1\_numbers) \Rightarrow (\forall X5.(m1\_subset\_1\ X5\ k1\_numbers) \Rightarrow (k8\_euclid\ np\_\_3\ (k1\_euclid\_8\ X0\ X1\ X2)\ (k1\_euclid\_8\ X3\ X4\ X5) = k1\_euclid\_8\ (k10\_binop\_2\ X0\ X3)\ (k10\_binop\_2\ X1\ X4)\ (k10\_binop\_2\ X2\ X5))))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0\ X0) \wedge (v1\_xreal\_0\ X1)) \Rightarrow (m1\_subset\_1\ (k10\_binop\_2\ X0\ X1)\ k1\_numbers) \tag{3}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (v1\_xreal\_0\ X0) \tag{4}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k1\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ k1\_numbers) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ k1\_numbers) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ k1\_numbers) \Rightarrow (\forall X5.(m1\_subset\_1\ X5\ k1\_numbers) \Rightarrow (k8\_euclid\ np\_\_3\ (k1\_euclid\_8\ X0\ X1\ X2)\ (k1\_euclid\_8\ X3\ X4\ X5) = k7\_euclid\ np\_\_3\ (k7\_euclid\ np\_\_3\ (k9\_euclid\ np\_\_3\ k2\_euclid\_8\ (k10\_binop\_2\ X0\ X3))\ (k9\_euclid\ np\_\_3\ k3\_euclid\_8\ (k10\_binop\_2\ X1\ X4)))\ (k9\_euclid\ np\_\_3\ k4\_euclid\_8\ (k10\_binop\_2\ X2\ X5))))))))$$