t37_euclid_6 (TMMGfzsPaiP-Tiu9aMoNDfhqHNxoCvWbExn6)

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 $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $k5\_jgraph\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_euclid\_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k2\_numbers : \iota$ be given. Let $k4\_complex2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k32\_sin\_cos : \iota$ be given. Let $k2\_euclid\_3 : \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k2\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k2\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ k2\_numbers) \Rightarrow (\neg(X0 \neq X1) \wedge ((X0 \neq X2) \wedge ((X1 \neq X2) \wedge ((k4\_complex2\ X0\ X1\ X2 = k6\_numbers) \wedge ((\neg(k4\_complex2\ X1\ X2\ X0 = k6\_numbers) \wedge (k4\_complex2\ X2\ X0\ X1 = k32\_sin\_cos)) \wedge (\neg(k4\_complex2\ X1\ X2\ X0 = k32\_sin\_cos) \wedge (k4\_complex2\ X2\ X0\ X1 = k6\_numbers))))))))) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow ((k2\_euclid\_3\ X0 = k2\_euclid\_3\ X1) \Rightarrow (X0 = X1))) \tag{2}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (\forall X3.(v1\_xreal\_0\ X3) \Rightarrow (\forall X4.(v1\_xreal\_0\ X4) \Rightarrow (\forall X5.(v1\_xreal\_0\ X5) \Rightarrow (\neg(X0 \in k5\_jgraph\_6\ X3\ X4\ X5) \wedge ((X1 \in k5\_jgraph\_6\ X3\ X4\ X5) \wedge ((X2 \in k5\_jgraph\_6\ X3\ X4\ X5) \wedge ((X0 \neq X1) \wedge ((X1 \neq X2) \wedge (k4\_euclid\_3\ X0\ X1\ X2 = k32\_sin\_cos)))))))))) \tag{3}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{4}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (m1\_subset\_1\ (k2\_euclid\_3\ X0)\ k2\_numbers) \tag{5}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (k4\_euclid\_3\ X0\ X1\ X2 = k4\_complex2\ (k2\_euclid\_3\ X0)\ (k2\_euclid\_3\ X1)\ (k2\_euclid\_3\ X2)))) \tag{6}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X3.(v1\_xreal\_0\ X3)\Rightarrow(\forall X4.(v1\_xreal\_0\ X4)\Rightarrow(\forall X5.(v1\_xreal\_0\ X5)\Rightarrow(((X0 \in k5\_jgraph\_6\ X3\ X4\ X5)\wedge((X1 \in k5\_jgraph\_6\ X3\ X4\ X5)\wedge((X2 \in k5\_jgraph\_6\ X3\ X4\ X5)\wedge(k4\_euclid\_3\ X0\ X1\ X2 = k6\_numbers))))\Rightarrow ((X0 = X1)\vee((X1 = X2)\vee(X0 = X2)))))))))$$