t59_complex2 (TMTEGb4NDnM3oZT1ji15q6XqotTt7M76LHK)

October 27, 2020

Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_numbers : \iota$ be given. Let $k1\_numbers : \iota$ be given. Let $k2\_complex2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11\_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_complex1 : \iota \Rightarrow \iota$ be given. Let $k8\_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xcmplx\_0 : \iota \Rightarrow \iota$ be given. Let $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k2\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k1\_numbers) \Rightarrow (k2\_complex2\ (k10\_complex1\ X0)\ X1 = k10\_complex1\ (k2\_complex2\ X0\ X1))) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k2\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k2\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ k1\_numbers) \Rightarrow (k2\_complex2\ (k8\_complex1\ X0\ X1)\ X2 = k8\_complex1\ (k2\_complex2\ X0\ X2)\ (k2\_complex2\ X1\ X2)))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0) \wedge (v1\_xcmplx\_0\ X1)) \Rightarrow (k2\_xcmplx\_0\ X0\ (k4\_xcmplx\_0\ X1) = k6\_xcmplx\_0\ X0\ X1) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k2\_numbers) \wedge (m1\_subset\_1\ X1\ k2\_numbers)) \Rightarrow (k8\_complex1\ X0\ X1 = k2\_xcmplx\_0\ X0\ X1) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k2\_numbers) \wedge (m1\_subset\_1\ X1\ k2\_numbers)) \Rightarrow (k11\_complex1\ X0\ X1 = k6\_xcmplx\_0\ X0\ X1) \tag{5}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k2\_numbers) \Rightarrow (k10\_complex1\ X0 = k4\_xcmplx\_0\ X0) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0)\wedge(m1\_subset\_1\ X1\ k1\_numbers))\Rightarrow (m1\_subset\_1\ (k2\_complex2\ X0\ X1)\ k2\_numbers) \tag{7}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k2\_numbers)\Rightarrow(m1\_subset\_1\ (k10\_complex1\ X0)\ k2\_numbers) \tag{8}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k2\_numbers)\Rightarrow(v1\_xcmplx\_0\ X0) \tag{9}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ k2\_numbers)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ k2\_numbers)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ k1\_numbers)\Rightarrow(k2\_complex2\ (k11\_complex1\ X0\ X1)\ X2 = k11\_complex1\ (k2\_complex2\ X0\ X2)\ (k2\_complex2\ X1\ X2))))$$