# l64_jgraph_3 (TMEvRU9YY5Hv4yrwXrp6NCosSgkiw8PUfsg)

October 27, 2020

Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $k5\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_square\_1 : \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k1\_real\_1 : \iota \Rightarrow \iota$ be given. Let $k21\_sin\_cos : \iota \Rightarrow \iota$ be given. Let $k10\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k32\_sin\_cos : \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k18\_sin\_cos : \iota \Rightarrow \iota$ be given. Let $k7\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xcmplx\_0 : \iota \Rightarrow \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_0 : \iota$ be given. Let $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k31\_sin\_cos : \iota$ be given. Assume the following.

$$(k21\_sin\_cos\ (k10\_real\_1\ k32\_sin\_cos\ np\_\_2) = k6\_numbers) \wedge ((k18\_sin\_cos\ (k10\_real\_1\ k32\_sin\_cos\ np\_\_2) = np\_\_1) \wedge ((k21\_sin\_cos\ k32\_sin\_cos = k1\_real\_1\ np\_\_1) \wedge ((k18\_sin\_cos\ k32\_sin\_cos = k6\_numbers) \wedge ((k21\_sin\_cos\ (k7\_real\_1\ k32\_sin\_cos\ (k10\_real\_1\ k32\_sin\_cos\ np\_\_2)) = k6\_numbers) \wedge ((k18\_sin\_cos\ (k7\_real\_1\ k32\_sin\_cos\ (k10\_real\_1\ k32\_sin\_cos\ np\_\_2)) = k1\_real\_1\ np\_\_1) \wedge ((k21\_sin\_cos\ (k8\_real\_1\ np\_\_2\ k32\_sin\_cos) = np\_\_1) \wedge (k18\_sin\_cos\ (k8\_real\_1\ np\_\_2\ k32\_sin\_cos) = k6\_numbers)))))))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xxreal\_0\ X1) \Rightarrow ((r1\_xxreal\_0\ X0\ X1) \wedge (r1\_xxreal\_0\ X1\ X0)) \Rightarrow (X0 = X1))) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\neg(k3\_xcmplx\_0\ X0\ X0 = np\_\_1) \wedge ((X0 \neq np\_\_1) \wedge (X0 \neq k4\_xcmplx\_0\ np\_\_1))) \tag{3}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_1) \wedge (m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_1\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_1\ k1\_numbers)) \tag{4}$$

Assume the following.

$$k2\_xcmplx\_0\ np\_\_1\ (k4\_xcmplx\_0\ np\_\_1) = np\_\_0 \tag{5}$$

Assume the following.

$$r1\_xxreal\_0\ np\_\_0\ np\_\_0 \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0\ X0)\wedge(m1\_subset\_1\ X1\ k1\_numbers))\Rightarrow (k5\_real\_1\ X0\ X1 = k6\_xcmplx\_0\ X0\ X1) \tag{7}$$

Assume the following.

$$k32\_sin\_cos = k31\_sin\_cos \tag{8}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(k1\_real\_1\ X0 = k4\_xcmplx\_0\ X0) \tag{9}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(\neg(\neg r1\_xxreal\_0\ X1\ X0)\wedge(r1\_xxreal\_0\ k6\_numbers\ (k6\_xcmplx\_0\ X0\ X1)))) \tag{10}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(\neg(\neg r1\_xxreal\_0\ X1\ X0)\wedge(r1\_xxreal\_0\ (k6\_xcmplx\_0\ X1\ X0)\ k6\_numbers))) \tag{11}$$

Assume the following.

$$k2\_xcmplx\_0\ np\_\_1\ (k4\_xcmplx\_0\ np\_\_1) = k6\_numbers \tag{12}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xreal\_0\ (k3\_square\_1\ X0)) \tag{13}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(k3\_square\_1\ X0 = k3\_xcmplx\_0\ X0\ X0) \tag{14}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xxreal\_0\ X0) \tag{15}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xcmplx\_0\ X0) \tag{16}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(v1\_xreal\_0\ X0) \tag{17}$$

**Theorem 1**

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\neg(k5\_real\_1\ (k3\_square\_1\ X0)\ np\_\_1 = k6\_numbers)\wedge((X0\neq np\_\_1)\wedge(X0\neq k1\_real\_1\ np\_\_1)))$$