

l56_wsierp_1 (TM-
TRa6cMNnTYnxiT7XCdGnaNo6dQSDe2E4z)

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Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k6_int_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $r2_int_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k22_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v1_int_1 X2) \Rightarrow (((k6_int_1 X1 X0 = k6_int_1 X2 X0) \Rightarrow ((X0 = k6_numbers) \vee \\ & (r2_int_1 X1 X2 X0)))) \wedge ((r2_int_1 X1 X2 X0) \Rightarrow (k6_int_1 X1 X0 = k6_int_1 \\ & X2 X0)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (r2_int_1 (k3_xcmplx_0 X0 X1) k6_numbers X0)) \tag{2}$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow (k6_int_1 X0 X0 = k6_numbers) \tag{3}$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow ((r2_int_1 X0 k6_numbers X0) \wedge (r2_int_1 k6_numbers X0 X0)) \tag{4}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v1_int_1 X0) \wedge (v1_int_1 X1)) \Rightarrow (k22_binop_2 X0 X1 = k3_xcmplx_0 X0 X1) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1_int_1 X0) \wedge (v1_int_1 X1)) \Rightarrow (v1_int_1 (k3_xcmplx_0 X0 X1)) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.((v1_int_1 X0)\wedge(v1_int_1 X1))\Rightarrow(v1_int_1 (k6_int_1 X0 X1)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1_int_1 X0)\wedge(v1_int_1 X1))\Rightarrow(k22_binop_2 X0 X1 = k22_binop_2 X1 X0) \quad (9)$$

Theorem 1

$$\forall X0.(v1_int_1 X0)\Rightarrow(\forall X1.(v1_int_1 X1)\Rightarrow(k6_int_1 (k3_xcmplx_0 X0 X1) X1 = k6_numbers))$$