

l11_int_2 (TM- cEvngcpJPdQu8ks5awBC8kvQWPdVzaMsD)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_int_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow ((r1_int_1 k6_numbers X0) \Leftrightarrow (X0 = k6_numbers)) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k3_xcmplx_0 X0 k6_numbers = k6_numbers) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ (v7_ordinal1 X2) \Rightarrow ((X1 = k3_xcmplx_0 X2 X0) \Rightarrow ((X0 = k6_numbers) \vee \\ (r1_xxreal_0 X2 X1)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X0)) \Rightarrow (X0 = X1)) \quad (4)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow ((r1_int_1 X0 X1) \Leftrightarrow (r1_int_1 (k4_xcmplx_0 X0) X1))) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ (v1_int_1 X2) \Rightarrow (((r1_int_1 X0 X1) \wedge (r1_int_1 X1 X2)) \Rightarrow (r1_int_1 X0 X2)))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow ((r1_int_1 X0 (k4_xcmplx_0 X0)) \wedge (r1_int_1 (k4_xcmplx_0 X0) X0)) \quad (7)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((r1_int_1 X0 X1) \Leftrightarrow (\exists X2.(v7_ordinal1 X2) \wedge (X1 = k3_xcmplx_0 X0 X2)))) \quad (8)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow ((v1_xcmplx_0 (k4_xcmplx_0 X0)) \wedge (v1_int_1 (k4_xcmplx_0 X0))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((v1_int_1 X0) \wedge (v1_int_1 X1)) \Rightarrow (v1_int_1 (k2_xcmplx_0 X0 X1)) \quad (10)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow ((X1 = k4_xcmplx_0 X0) \Leftrightarrow (k2_xcmplx_0 X0 X1 = k6_numbers))) \quad (11)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow ((r1_int_1 X0 X1) \Leftrightarrow (\exists X2.(v1_int_1 X2) \wedge (X1 = k3_xcmplx_0 X0 X2)))) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (k3_xcmplx_0 X0 X1 = k3_xcmplx_0 X1 X0) \quad (13)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xreal_0 X0) \quad (14)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_xreal_0 X0) \quad (15)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_xcmplx_0 X0) \quad (16)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_int_1 X0) \quad (17)$$

Theorem 1

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((r1_int_1 X0 X1) \wedge (r1_int_1 X1 X0)) \Rightarrow (X0 = X1))$$