

t7_int_1 (TMWYam-
dRzi4Z6jSWmDYbHJyTNKh4G8gTyWg)

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Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Assume the following.

$$k6_numbers = k1_xboole_0 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xreal_0 X0) \wedge (m1_subset_1 X1 k1_numbers)) \Rightarrow (k3_real_1 X0 X1 = k2_xcmplx_0 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. (v1_xreal_0 X0) \Rightarrow (\forall X1. (v1_xreal_0 X1) \Rightarrow (\neg(\neg r1_xxreal_0 X1 X0) \wedge (r1_xxreal_0 (k6_xcmplx_0 X1 X0) k6_numbers))) \quad (3)$$

Assume the following.

$$m1_subset_1 np_1 k1_numbers \quad (4)$$

Assume the following.

$$\forall X0. (v1_xreal_0 X0) \Rightarrow (\forall X1. (v1_xreal_0 X1) \Rightarrow (\forall X2. (v1_xreal_0 X2) \Rightarrow ((r1_xxreal_0 X0 (k6_xcmplx_0 X1 X2)) \Rightarrow (r1_xxreal_0 (k2_xcmplx_0 X0 X2) X1)))) \quad (5)$$

Assume the following.

$$\forall X0. (v1_int_1 X0) \Rightarrow ((\neg r1_xxreal_0 X0 k6_numbers) \Rightarrow (r1_xxreal_0 np_1 X0)) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_int_1 X0) \wedge (v1_int_1 X1)) \Rightarrow (v1_int_1 (k6_xcmplx_0 X0 X1)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0)\wedge(v1_xcmplx_0 X1))\Rightarrow(k2_xcmplx_0 X0 X1 = k2_xcmplx_0 X1 X0) \quad (8)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(v1_xcmplx_0 X0) \quad (9)$$

Assume the following.

$$\forall X0.(v1_int_1 X0)\Rightarrow(v1_xreal_0 X0) \quad (10)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(v1_xreal_0 X0) \quad (11)$$

Theorem 1

$$\forall X0.(v1_int_1 X0)\Rightarrow(\forall X1.(v1_int_1 X1)\Rightarrow((\neg r1_xxreal_0 X1 X0)\Rightarrow(r1_xxreal_0 (k3_real_1 X0 np_1) X1)))$$