

t45_int_1 (TM-
LVyskJ1shMCP43Yb1NneVjCtkEApMXQdp)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k4_int_1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k1_int_1 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k3_int_1 : \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (k1_int_1 (k4_int_1 X0) = k6_numbers) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((\neg r1_xxreal_0 np_1 (k4_int_1 X0)) \wedge (r1_xxreal_0 k6_numbers (k4_int_1 X0))) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((\neg(\neg r1_xxreal_0 X0 (k1_int_1 X0)) \wedge (v1_int_1 X0)) \wedge (\neg(\neg v1_int_1 X0) \wedge (r1_xxreal_0 X0 (k1_int_1 X0)))) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((k1_int_1 X0 = X0) \Leftrightarrow (v1_int_1 X0)) \quad (4)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (5)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (k4_int_1 X0 = k3_int_1 X0) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\neg(\neg r1_xxreal_0 X1 X0) \wedge (r1_xxreal_0 (k6_xcmplx_0 X1 X0) k6_numbers))) \quad (7)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xreal_0 (k3_int_1 X0)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1_int_1 X0) \wedge (v1_int_1 X1)) \Rightarrow (v1_int_1 (k6_xcmplx_0 X0 X1)) \quad (9)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_int_1 (k1_int_1 X0)) \quad (10)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (k3_int_1 X0 = k6_xcmplx_0 X0 (k1_int_1 X0)) \quad (11)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow (v1_xreal_0 X0) \quad (12)$$

Theorem 1 $\forall X0.(v1_xreal_0 X0) \Rightarrow ((k4_int_1 X0 = k6_numbers) \Leftrightarrow (v1_int_1 X0)).$