

t6_absvalue

(TMWt765zWHSgT9wBC6A6rgPnBctABGfG3iX)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k8_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_complex1 : \iota \Rightarrow \iota$ be given. Let $k13_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k17_complex1 : \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $np_0 : \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k16_complex1 : \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (k17_complex1 (k3_xcmplx_0 X0 X1) = k8_real_1 (k17_complex1 X0) (k17_complex1 X1))) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow ((X0 \neq k6_numbers) \Rightarrow (k3_xcmplx_0 X0 (k7_xcmplx_0 np_1 X0) = np_1)) \quad (3)$$

Assume the following.

$$((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \quad (4)$$

Assume the following.

$$v1_xboole_0 np_0 \quad (5)$$

Assume the following.

$$k4_xcmplx_0 (k4_xcmplx_0 np_1) = np_1 \quad (6)$$

Assume the following.

$$\neg r1_xreal_0 \text{ } np_0 (k4_xcmplx_0 \text{ } np_1) \quad (7)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (8)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (9)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 \text{ } X0) \Rightarrow (k18_complex1 \text{ } X0 = k16_complex1 \text{ } X0) \quad (10)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 \text{ } X0) \Rightarrow (k17_complex1 \text{ } X0 = k16_complex1 \text{ } X0) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 \text{ } X0) \wedge (v1_xcmplx_0 \text{ } X1)) \Rightarrow (k13_complex1 \text{ } X0 \text{ } X1 = k7_xcmplx_0 \text{ } X0 \text{ } X1) \quad (12)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 \text{ } X0) \Rightarrow (k17_complex1 (k17_complex1 \text{ } X0) = k17_complex1 \text{ } X0) \quad (13)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 \text{ } X0) \Rightarrow (k16_complex1 (k16_complex1 \text{ } X0) = k16_complex1 \text{ } X0) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 \text{ } X0) \wedge (v1_xreal_0 \text{ } X1)) \Rightarrow (v1_xreal_0 (k7_xcmplx_0 \text{ } X0 \text{ } X1)) \quad (15)$$

Assume the following.

$$\forall X0.(v1_xreal_0 \text{ } X0) \Rightarrow ((v1_xcmplx_0 (k4_xcmplx_0 \text{ } X0)) \wedge (v1_xreal_0 (k4_xcmplx_0 \text{ } X0))) \quad (16)$$

Assume the following.

$$\forall X0.(v1_xreal_0 \text{ } X0) \Rightarrow (((r1_xreal_0 \text{ } k6_numbers \text{ } X0) \Rightarrow (k16_complex1 \text{ } X0 = X0)) \wedge ((\neg r1_xreal_0 \text{ } k6_numbers \text{ } X0) \Rightarrow (k16_complex1 \text{ } X0 = k4_xcmplx_0 \text{ } X0))) \quad (17)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (18)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xcmplx_0 X0) \quad (19)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow (v1_xreal_0 X0) \quad (20)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_int_1 X0) \quad (21)$$

Theorem 1

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((X0 \neq k6_numbers) \Rightarrow (k8_real_1 (k18_complex1 X0) (k18_complex1 (k13_complex1 np_1 X0)) = np_1))$$