

t14_absvalue
(TMWuLcoLeTaM9q775c2Vk1jhi4XATmp3aB5)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k1_absvalue : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ 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 $k1_real_1 : \iota \Rightarrow \iota$ be given. Assume the following.

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

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \quad (2)$$

Assume the following.

$$v1_xboole_0 np_0 \quad (3)$$

Assume the following.

$$\neg r1_xxreal_0 np_0 (k4_xcmplx_0 np_1) \quad (4)$$

Assume the following.

$$r1_xxreal_0 np_0 np_1 \quad (5)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (6)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (k1_real_1 X0 = k4_xcmplx_0 X0) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (((\neg r1_xxreal_0 X0 k6_numbers) \Rightarrow (\\ & k1_absvalue X0 = np_1)) \wedge (((\neg r1_xxreal_0 k6_numbers X0) \Rightarrow (k1_absvalue \\ & X0 = k1_real_1 np_1)) \wedge (((r1_xxreal_0 X0 k6_numbers) \wedge (r1_xxreal_0 \\ & k6_numbers X0)) \Rightarrow (k1_absvalue X0 = k6_numbers)))) \end{aligned} \quad (8)$$

Theorem 1

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\neg(k1_absvalue X0 = np_1) \wedge (r1_xxreal_0 X0 k6_numbers))$$