

t7_integra2 (TMVSd- sjm6hq7w8qsRN7WZiKdRZgMvk8yHJJ)

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Let $v3_membered : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_integra2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k23_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. ((v3_membered X0) \wedge (v1_xreal_0 X1)) \Rightarrow (k1_integra2 X0 X1 = k23_member_1 X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (((\neg v1_xboole_0 X0) \wedge (v1_membered X0)) \wedge (v1_xcmplx_0 X1)) \Rightarrow (\neg v1_xboole_0 (k23_member_1 X0 X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xboole_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (v1_xboole_0 (k23_member_1 X0 X1)) \quad (3)$$

Assume the following.

$$\forall X0. (v3_membered X0) \Rightarrow (v1_membered X0) \quad (4)$$

Assume the following.

$$\forall X0. (v1_xreal_0 X0) \Rightarrow (v1_xcmplx_0 X0) \quad (5)$$

Theorem 1

$$\forall X0. (v3_membered X0) \Rightarrow (\forall X1. (v1_xreal_0 X1) \Rightarrow ((v1_xboole_0 X0) \Leftrightarrow (v1_xboole_0 (k1_integra2 X0 X1))))$$