

l21_convfun1

(TMajLZnSprr4ZbrssnTA7bxa2ynMnCiCR9A)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_numbers : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k9_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_supinf_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_extreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_measure6 : \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k7_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 k7_numbers) \Rightarrow (\forall X2.(m1_subset_1 X2 k1_numbers) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 k1_numbers) \Rightarrow (((X0 = X2) \wedge (X1 = X3)) \Rightarrow (k1_extreal1 \\ & X0 X1 = k11_binop_2 X2 X3)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow (k9_binop_2 X0 X1 = k2_xcmplx_0 X0 X1) \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1 X0 k7_numbers) \wedge (m1_subset_1 X1 k7_numbers)) \Rightarrow (k3_supinf_2 X0 X1 = k1_xxreal_3 X0 X1) \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1_xreal_0 X0) \wedge \\ & ((v1_xreal_0 X1) \wedge ((v1_xcmplx_0 X2) \wedge (v1_xcmplx_0 X3)))) \Rightarrow (((\\ & X0 = X2) \wedge (X1 = X3)) \Rightarrow (k1_xxreal_3 X0 X1 = k2_xcmplx_0 X2 X3)) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0. (v1_xxreal_0 X0) \Rightarrow (m1_subset_1 (k1_measure6 X0) k7_numbers) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k7_numbers)\wedge(m1_subset_1 X1 k7_numbers))\Rightarrow(m1_subset_1 (k1_extreal1 X0 X1) k7_numbers) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0)\wedge(v1_xreal_0 X1))\Rightarrow(m1_subset_1 (k11_binop_2 X0 X1) k1_numbers) \quad (7)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0)\Rightarrow(k1_measure6 X0 = X0) \quad (8)$$

Assume the following.

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

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(v1_xxreal_0 X0) \quad (10)$$

Assume the following.

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

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k7_numbers)\Rightarrow(\forall X1.(m1_subset_1 X1 k7_numbers)\Rightarrow(\forall X2.(m1_subset_1 X2 k1_numbers)\Rightarrow(\forall X3. \\ & (m1_subset_1 X3 k1_numbers)\Rightarrow(\forall X4.(m1_subset_1 X4 k1_numbers)\Rightarrow \\ & (\forall X5.(m1_subset_1 X5 k1_numbers)\Rightarrow(((X0 = X2)\wedge(X1 = X3))\Rightarrow \\ & (k9_binop_2 (k11_binop_2 X4 X2) (k11_binop_2 X5 X3) = k3_supinf_2 \\ & (k1_extreal1 (k1_measure6 X4) X0) (k1_extreal1 (k1_measure6 X5) X1))))))))) \end{aligned}$$