

t9_taylor_1

(TMawJ96iHUQLEFJ2ZbC5AneACBGwUU6vbtbf)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k9_prepower : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k26_sin_cos : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k25_sin_cos : \iota \Rightarrow \iota$ be given. Let $k3_power : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_power : \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ 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 $k7_power : \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k4_prepower : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (k9_prepower (k25_sin_cos X0) X1 = k25_sin_cos (k3_xcmplx_0 X1 X0))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\neg r1_xxreal_0 (k25_sin_cos X0) k6_numbers) \quad (2)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$k8_power = k7_power \quad (5)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (k26_sin_cos X0 = k25_sin_cos X0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow (v1_xreal_0 (k9_prepower X0 X1)) \quad (7)$$

Assume the following.

$$v1_xreal_0 \ k7_power \quad (8)$$

Assume the following.

$$k7_power = k26_sin_cos \ np_1 \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 \ X0) \Rightarrow (\forall X1.(v1_xreal_0 \ X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 \ X2) \Rightarrow (((\neg r1_xreal_0 \ X0 \ k6_numbers) \Rightarrow ((X2 = k3_power \\ & X0 \ X1) \Leftrightarrow (X2 = k9_prepower \ X0 \ X1))) \wedge (((X0 = k6_numbers) \Rightarrow ((r1_xreal_0 \\ & X1 \ k6_numbers) \vee ((X2 = k3_power \ X0 \ X1) \Leftrightarrow (X2 = k6_numbers)))) \wedge ((v1_int_1 \\ & X1) \Rightarrow ((X2 = k3_power \ X0 \ X1) \Leftrightarrow (\exists X3.(v1_int_1 \ X3) \wedge ((X3 = X1) \wedge \\ & (X2 = k4_prepower \ X0 \ X3)))))))))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 \ X0) \wedge (v1_xcmplx_0 \ X1)) \Rightarrow (k3_xcmplx_0 \ X0 \ X1 = k3_xcmplx_0 \ X1 \ X0) \quad (11)$$

Assume the following.

$$\forall X0.(v1_xreal_0 \ X0) \Rightarrow (v1_xcmplx_0 \ X0) \quad (12)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k1_numbers) \Rightarrow (v1_xreal_0 \ X0) \quad (13)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xreal_0 \ X0) \Rightarrow (((k9_prepower \ (k26_sin_cos \ np_1) \\ & X0 = k25_sin_cos \ X0) \wedge ((k3_power \ (k26_sin_cos \ np_1) \ X0 = k25_sin_cos \\ & X0) \wedge ((k3_power \ k8_power \ X0 = k25_sin_cos \ X0) \wedge (k9_prepower \ k8_power \\ & X0 = k25_sin_cos \ X0)))))) \end{aligned}$$