

t33_asympt_0

(TMdgJDCtKwdyqNs7STyiRiWL4iyRPgPZqG5)

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Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $v4_asympt_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_comseq_2 : \iota \Rightarrow o$ be given. Let $k52_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_seq_2 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k8_asympt_0 : \iota \Rightarrow \iota$ be given. Let $v2_asympt_0 : \iota \Rightarrow o$ be given. Let $k7_asympt_0 : \iota \Rightarrow \iota$ be given. Let $k6_asympt_0 : \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_asympt_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\ & ((v2_asympt_0 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers k1_numbers)))))) \Rightarrow (X0 \in k8_asympt_0 X0) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\ & ((v4_asympt_0 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers k1_numbers)))))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge (\\ & (v1_funct_2 X1 k5_numbers k1_numbers) \wedge ((v4_asympt_0 X1) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow ((\\ & v2_comseq_2 (k52_valued_1 k5_numbers k1_numbers k1_numbers X0 \\ & X1)) \Rightarrow ((r1_xxreal_0 (k2_seq_2 (k52_valued_1 k5_numbers k1_numbers \\ & k1_numbers X0 X1)) k6_numbers) \vee (k7_asympt_0 X0 = k7_asympt_0 X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\
& ((v4_asympt_0 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k5_numbers k1_numbers)))))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge (\\
& (v1_funct_2 X1 k5_numbers k1_numbers) \wedge ((v4_asympt_0 X1) \wedge (m1_subset_1 \\
& X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow ((\\
& v2_comseq_2 (k52_valued_1 k5_numbers k1_numbers k1_numbers X0 \\
& X1)) \Rightarrow ((r1_xreal_0 (k2_seq_2 (k52_valued_1 k5_numbers k1_numbers \\
& k1_numbers X0 X1)) k6_numbers) \vee (k6_asympt_0 X0 = k6_asympt_0 X1))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\
& ((v2_asympt_0 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k5_numbers k1_numbers)))))) \Rightarrow (k8_asympt_0 X0 = k3_xboole_0 (k6_asympt_0 \\
& X0) (k7_asympt_0 X0))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\
& k1_numbers))) \Rightarrow (((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers \\
& k1_numbers) \wedge (v4_asympt_0 X0))) \Rightarrow ((v1_funct_1 X0) \wedge ((v1_funct_2 \\
& X0 k5_numbers k1_numbers) \wedge ((v2_asympt_0 X0) \wedge (v5_asympt_0 X0))))))
\end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\
& ((v4_asympt_0 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k5_numbers k1_numbers)))))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge (\\
& (v1_funct_2 X1 k5_numbers k1_numbers) \wedge ((v4_asympt_0 X1) \wedge (m1_subset_1 \\
& X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow ((\\
& v2_comseq_2 (k52_valued_1 k5_numbers k1_numbers k1_numbers X0 \\
& X1)) \Rightarrow ((r1_xreal_0 (k2_seq_2 (k52_valued_1 k5_numbers k1_numbers \\
& k1_numbers X0 X1)) k6_numbers) \vee (X0 \in k8_asympt_0 X1))))))
\end{aligned}$$