

t32_asympt_0 (TMUudT- gtCEA7RUEpX199LW5NS79YYRvMbxK)

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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 $v2_asympt_0 : \iota \Rightarrow o$ 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 $k8_asympt_0 : \iota \Rightarrow \iota$ be given. Let $k1_asympt_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_asympt_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_asympt_0 : \iota \Rightarrow \iota$ be given. Let $k7_asympt_0 : \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\ & ((v2_asympt_0 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers k1_numbers)))))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\ & (v1_funct_2 X1 k5_numbers k1_numbers) \wedge ((v2_asympt_0 X1) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow (k6_asympt_0 \\ & (k1_asympt_0 X0 X1) = k6_asympt_0 (k5_asympt_0 X0 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\ & ((v2_asympt_0 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers k1_numbers)))))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\ & (v1_funct_2 X1 k5_numbers k1_numbers) \wedge ((v2_asympt_0 X1) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow (k7_asympt_0 \\ & (k1_asympt_0 X0 X1) = k7_asympt_0 (k5_asympt_0 X0 X1))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1.(((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers \\ & k1_numbers) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\ & k1_numbers)))))) \wedge ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers \\ & k1_numbers) \wedge ((v2_asympt_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow ((v1_funct_1 (k5_asympt_0 \\ & X0 X1)) \wedge ((v1_funct_2 (k5_asympt_0 X0 X1) k5_numbers k1_numbers) \wedge \\ & (v2_asympt_0 (k5_asympt_0 X0 X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers \\ & k1_numbers) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\ & k1_numbers)))))) \wedge ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers \\ & k1_numbers) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\ & k1_numbers)))))) \Rightarrow ((v1_funct_1 (k5_asympt_0 X0 X1)) \wedge ((v1_funct_2 \\ & (k5_asympt_0 X0 X1) k5_numbers k1_numbers) \wedge (m1_subset_1 (k5_asympt_0 \\ & X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers \\ & k1_numbers) \wedge ((v2_asympt_0 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k5_numbers k1_numbers)))))) \wedge ((v1_funct_1 X1) \wedge \\ & ((v1_funct_2 X1 k5_numbers k1_numbers) \wedge ((v2_asympt_0 X1) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow (\\ & (v1_funct_1 (k1_asympt_0 X0 X1)) \wedge ((v1_funct_2 (k1_asympt_0 X0 \\ & X1) k5_numbers k1_numbers) \wedge ((v2_asympt_0 (k1_asympt_0 X0 X1)) \wedge \\ & (m1_subset_1 (k1_asympt_0 X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\ & k1_numbers)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\ & ((v2_asympt_0 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers k1_numbers)))))) \Rightarrow (k8_asympt_0 X0 = k3_xboole_0 (k6_asympt_0 \\ & X0) (k7_asympt_0 X0)) \end{aligned} \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\ & ((v2_asympt_0 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers k1_numbers)))))) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge (\\ & (v1_funct_2 X1 k5_numbers k1_numbers) \wedge ((v2_asympt_0 X1) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow (k8_asympt_0 \\ & (k1_asympt_0 X0 X1) = k8_asympt_0 (k5_asympt_0 X0 X1))) \end{aligned}$$