t40_asympt_0 (TMLjFahDnMPxYN-DAXF1p94c6NEs1Wc8apqu)

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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 $v6\_asympt\_0 : \iota \Rightarrow o$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7\_asympt\_0 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np\_\_2 : \iota$ be given. Let $k11\_asympt\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13\_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_asympt\_0 : \iota \Rightarrow \iota$ be given. Let $k10\_asympt\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_asympt\_0 : \iota \Rightarrow \iota$ be given. Let $k9\_asympt\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_asympt\_0 : \iota \Rightarrow \iota$ be given. Let $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1\_funct\_1\ X0) \wedge ((v1\_funct\_2\ X0\ k5\_numbers\ k1\_numbers) \wedge ((v2\_asympt\_0\ X0) \wedge (m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k1\_numbers))))))) \Rightarrow (\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ k5\_numbers\ k1\_numbers) \wedge ((v2\_asympt\_0\ X1) \wedge ((v6\_asympt\_0\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k1\_numbers))))))) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ k1\_numbers\ k5\_numbers) \Rightarrow (((v7\_asympt\_0\ X0) \wedge ((r1\_xxreal\_0\ np\_\_2\ X2) \wedge (X1 \in k10\_asympt\_0\ X0\ (ReplSep\ (toset\ (\lambda X3 : \iota.m2\_subset\_1\ X3\ k1\_numbers\ k5\_numbers))\ (\lambda X3 : \iota.True)\ (\lambda X3 : \iota.k13\_newton\ X2\ X3))))) \Rightarrow (X1 \in k7\_asympt\_0\ X0)))) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_funct\_1\ X0)\wedge((v1\_funct\_2\ X0\ k5\_numbers\ k1\_numbers)\wedge((v2\_asympt\_0\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k1\_numbers))))))\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ k5\_numbers\ k1\_numbers)\wedge((v2\_asympt\_0\ X1)\wedge((v6\_asympt\_0\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k1\_numbers)))))))\Rightarrow(\forall X2.(m2\_subset\_1\ X2\ k1\_numbers\ k5\_numbers)\Rightarrow(((v7\_asympt\_0\ X0)\wedge((r1\_xxreal\_0\ np\_\_2\ X2)\wedge(X1\in k9\_asympt\_0\ X0\ (ReplSep\ (toset\ (\lambda X3:\iota.m2\_subset\_1\ X3\ k1\_numbers\ k5\_numbers))\ (\lambda X3:\iota.True)\ (\lambda X3:\iota.k13\_newton\ X2\ X3)))))\Rightarrow(X1\in k6\_asympt\_0\ X0)))) \tag{2}$$

Assume the following.

$$\forall X0.((v1\_funct\_1\ X0)\wedge((v1\_funct\_2\ X0\ k5\_numbers\ k1\_numbers)\wedge((v2\_asympt\_0\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k1\_numbers))))))\Rightarrow(\forall X1.k11\_asympt\_0\ X0\ X1 = k3\_xboole\_0\ (k9\_asympt\_0\ X0\ X1)\ (k10\_asympt\_0\ X0\ X1)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k3\_xboole\_0\ X0\ X1)\Leftrightarrow(\forall X3.(X3\in X2)\Leftrightarrow((X3\in X0)\wedge(X3\in X1))) \tag{4}$$

Assume the following.

$$\forall X0.((v1\_funct\_1\ X0)\wedge((v1\_funct\_2\ X0\ k5\_numbers\ k1\_numbers)\wedge((v2\_asympt\_0\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k1\_numbers))))))\Rightarrow(k8\_asympt\_0\ X0 = k3\_xboole\_0\ (k6\_asympt\_0\ X0)\ (k7\_asympt\_0\ X0)) \tag{5}$$

Theorem 1

$$\forall X0.((v1\_funct\_1\ X0)\wedge((v1\_funct\_2\ X0\ k5\_numbers\ k1\_numbers)\wedge((v2\_asympt\_0\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k1\_numbers))))))\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ k5\_numbers\ k1\_numbers)\wedge((v2\_asympt\_0\ X1)\wedge((v6\_asympt\_0\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k1\_numbers)))))))\Rightarrow(\forall X2.(m2\_subset\_1\ X2\ k1\_numbers\ k5\_numbers)\Rightarrow(((v7\_asympt\_0\ X0)\wedge((r1\_xxreal\_0\ np\_\_2\ X2)\wedge(X1\in k11\_asympt\_0\ X0\ (ReplSep\ (toset\ (\lambda X3:\iota.m2\_subset\_1\ X3\ k1\_numbers\ k5\_numbers))\ (\lambda X3:\iota.True)\ (\lambda X3:\iota.k13\_newton\ X2\ X3)))))\Rightarrow(X1\in k8\_asympt\_0\ X0))))$$