t6_asympt_0 (TMLn2Mnud5WXU65QkW7ddbP5FR7K4rLNVPJ)

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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 $k6\_asympt\_0 : \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{1}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{2}$$

Assume the following.

$$\neg v1\_xboole\_0\ k1\_numbers \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X1) \wedge (m1\_funct\_2\ X2\ X0\ X1)) \Rightarrow (\forall X3.(m2\_funct\_2\ X3\ X0\ X1\ X2) \Rightarrow ((v1\_funct\_1\ X3) \wedge ((v1\_funct\_2\ X3\ X0\ X1) \wedge (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(\neg v1\_xboole\_0\ X1) \Rightarrow (m1\_funct\_2\ (k9\_funct\_2\ X0\ X1)\ X0\ X1) \tag{5}$$

Assume the following.

$$\forall X0.((v1\_funct\_1\ X0)\wedge((v1\_funct\_2\ X0\ k5\_numbers\ k1\_numbers)\wedge((v2\_asympt\_0\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k1\_numbers))))))\Rightarrow(k6\_asympt\_0\ X0 = ReplSep\ (toset\ (\lambda X1 : \iota.m2\_funct\_2\ X1\ k5\_numbers\ k1\_numbers\ (k9\_funct\_2\ k5\_numbers\ k1\_numbers)))\ (\lambda X1 : \iota.\exists X2.(m1\_subset\_1\ X2\ k1\_numbers)\wedge(\exists X3.(m2\_subset\_1\ X3\ k1\_numbers\ k5\_numbers)\wedge((\neg r1\_xxreal\_0\ X2\ k6\_numbers)\wedge(\forall X4.(m2\_subset\_1\ X4\ k1\_numbers\ k5\_numbers)\Rightarrow((r1\_xxreal\_0\ X3\ X4)\Rightarrow((r1\_xxreal\_0\ (k1\_seq\_1\ X1\ X4)\ (k8\_real\_1\ X2\ (k1\_seq\_1\ X0\ X4)))\wedge(r1\_xxreal\_0\ k6\_numbers\ (k1\_seq\_1\ X1\ X4))))))))\ (\lambda X1 : \iota.X1)) \tag{6}$$

Assume the following.

$$\forall X0.((v1\_funct\_1\ X0)\wedge((v1\_funct\_2\ X0\ k5\_numbers\ k1\_numbers)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k1\_numbers)))))\Rightarrow((v2\_asympt\_0\ X0)\Leftrightarrow(\exists X1.(m2\_subset\_1\ X1\ k1\_numbers\ k5\_numbers)\wedge(\forall X2.(m2\_subset\_1\ X2\ k1\_numbers\ k5\_numbers)\Rightarrow((r1\_xxreal\_0\ X1\ X2)\Rightarrow(r1\_xxreal\_0\ k6\_numbers\ (k1\_seq\_1\ X0\ X2))))))) \tag{7}$$

Theorem 1

$$\forall X0.\forall X1.((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ k5\_numbers\ k1\_numbers)\wedge((v2\_asympt\_0\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k1\_numbers))))))\Rightarrow((X0 \in k6\_asympt\_0\ X1)\Rightarrow((v1\_funct\_1\ X0)\wedge((v1\_funct\_2\ X0\ k5\_numbers\ k1\_numbers)\wedge((v2\_asympt\_0\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k1\_numbers)))))))$$