t42_setlim_1 (TMaKfmYGVEGbokExduNNKWTs2qE5aqrZuKT)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9\_setfam\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3\_prob\_1 : \iota \Rightarrow o$ be given. Let $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_setlim\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_kurato\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $k6\_numbers : \iota$ 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 $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k3\_setlim\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_card\_3 : \iota \Rightarrow \iota$ be given. Let $v3\_ordinal1 : \iota \Rightarrow o$ be given. Let $v2\_prob\_1 : \iota \Rightarrow o$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers) \Rightarrow (\forall X1.\forall X2.\ ((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ k5\_numbers\ (k9\_setfam\_1\ X1)) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k9\_setfam\_1\ X1)))))) \Rightarrow ((v3\_prob\_1\ X2) \Rightarrow (k3\_funct\_2\ k5\_numbers\ (k9\_setfam\_1\ X1)\ (k4\_setlim\_1\ X1\ X2)\ X0 = k3\_funct\_2\ k5\_numbers\ (k9\_setfam\_1\ X1)\ (k4\_setlim\_1\ X1\ X2)\ (k2\_nat\_1\ X0\ np\_\_1)))) \tag{1}$$

Assume the following.

$$m1\_subset\_1\ k1\_xboole\_0\ k4\_ordinal1 \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ k5\_numbers\ (k9\_setfam\_1\ X0)) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k9\_setfam\_1\ X0)))))) \Rightarrow (k3\_funct\_2\ k5\_numbers\ (k9\_setfam\_1\ X0)\ (k4\_setlim\_1\ X0\ X1)\ k6\_numbers = k1\_kurato\_0\ X0\ X1) \tag{3}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_1) \wedge (m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_1\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_1\ k1\_numbers)) \tag{4}$$

Assume the following.

$$\forall X0 : \iota \Rightarrow o.((X0\ k6\_numbers) \wedge (\forall X1.(m2\_subset\_1\ X1\ k1\_numbers\ k5\_numbers) \Rightarrow ((X0\ X1) \Rightarrow (X0\ (k2\_nat\_1\ X1\ np\_\_1))))) \Rightarrow (\forall X1.(m2\_subset\_1\ X1\ k1\_numbers\ k5\_numbers) \Rightarrow (X0\ X1)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge ((\neg v1\_xboole\_0\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)))) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ X0\ X1) \Leftrightarrow (m1\_subset\_1\ X2\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.k9\_setfam\_1\ X0 = k1\_zfmisc\_1\ X0 \tag{7}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{8}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ k5\_numbers\ (k9\_setfam\_1\ X0)) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k9\_setfam\_1\ X0)))))) \Rightarrow (k4\_setlim\_1\ X0\ X1 = k3\_setlim\_1\ X1) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((\neg v1\_xboole\_0\ X0) \wedge (((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ X0\ X1) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))) \wedge (m1\_subset\_1\ X3\ X0))) \Rightarrow (k3\_funct\_2\ X0\ X1\ X2\ X3 = k1\_funct\_1\ X2\ X3) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ k5\_numbers\ (k9\_setfam\_1\ X0)) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k9\_setfam\_1\ X0)))))) \Rightarrow (k1\_kurato\_0\ X0\ X1 = k3\_card\_3\ X1) \tag{12}$$

Assume the following.

$$(\neg v1\_xboole\_0\ k4\_ordinal1) \wedge (v3\_ordinal1\ k4\_ordinal1) \tag{13}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ k5\_numbers\ (k9\_setfam\_1\ X0))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k9\_setfam\_1\ X0))))))\Rightarrow((v1\_funct\_1\ (k3\_setlim\_1\ X1))\wedge((v1\_funct\_2\ (k3\_setlim\_1\ X1)\ k5\_numbers\ (k9\_setfam\_1\ X0))\wedge(v2\_prob\_1\ (k3\_setlim\_1\ X1)))) \tag{14}$$

Assume the following.

$$m1\_subset\_1\ k5\_numbers\ (k1\_zfmisc\_1\ k1\_numbers) \tag{15}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ k5\_numbers\ (k9\_setfam\_1\ X0))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k9\_setfam\_1\ X0))))))\Rightarrow((v1\_funct\_1\ (k4\_setlim\_1\ X0\ X1))\wedge((v1\_funct\_2\ (k4\_setlim\_1\ X0\ X1)\ k5\_numbers\ (k9\_setfam\_1\ X0))\wedge(m1\_subset\_1\ (k4\_setlim\_1\ X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k9\_setfam\_1\ X0))))) \tag{16}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k5\_numbers)\wedge(v7\_ordinal1\ X1))\Rightarrow(m2\_subset\_1\ (k2\_nat\_1\ X0\ X1)\ k1\_numbers\ k5\_numbers) \tag{17}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \tag{18}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(v1\_xboole\_0\ X1)) \tag{19}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers)\Rightarrow(\forall X1.\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ k5\_numbers\ (k9\_setfam\_1\ X1))\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k9\_setfam\_1\ X1))))))\Rightarrow((v3\_prob\_1\ X2)\Rightarrow(k3\_funct\_2\ k5\_numbers\ (k9\_setfam\_1\ X1)\ (k4\_setlim\_1\ X1\ X2)\ X0 = k1\_kurato\_0\ X1\ X2)))$$