# t2_twoscomp (TMKcEYn22zkG7Do7XUcjmDXpYPx2qCVoLME)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_margrel1 : \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_twoscomp : \iota$ be given. Let $k10\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_margrel1 : \iota \Rightarrow \iota$ be given. Let $k10\_margrel1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_twoscomp : \iota$ be given. Let $k7\_twoscomp : \iota$ 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 $k4\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$(v1\_funct\_1\ k7\_twoscomp) \wedge ((v1\_funct\_2\ k7\_twoscomp\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1) \wedge (m1\_subset\_1\ k7\_twoscomp\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1)))) \tag{1}$$

Assume the following.

$$(v1\_funct\_1\ k6\_twoscomp) \wedge ((v1\_funct\_2\ k6\_twoscomp\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1) \wedge (m1\_subset\_1\ k6\_twoscomp\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1)))) \tag{2}$$

Assume the following.

$$(v1\_funct\_1\ k5\_twoscomp) \wedge ((v1\_funct\_2\ k5\_twoscomp\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1) \wedge (m1\_subset\_1\ k5\_twoscomp\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1)))) \tag{3}$$

Assume the following.

$$\forall X0.((v1\_funct\_1\ X0) \wedge ((v1\_funct\_2\ X0\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1) \wedge (m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1))))) \Rightarrow ((X0 = k7\_twoscomp) \Leftrightarrow (\forall X1.(m1\_subset\_1\ X1\ k6\_margrel1) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ k6\_margrel1) \Rightarrow (k1\_funct\_1\ X0\ (k10\_finseq\_1\ X1\ X2) = k9\_margrel1\ (k10\_margrel1\ (k9\_margrel1\ X1)\ (k9\_margrel1\ X2))))))) \tag{4}$$

Assume the following.

$$\forall X0.((v1\_funct\_1\ X0)\wedge((v1\_funct\_2\ X0\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1)))))\Rightarrow((X0 = k6\_twoscomp)\Leftrightarrow(\forall X1.(m1\_subset\_1\ X1\ k6\_margrel1)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ k6\_margrel1)\Rightarrow(k1\_funct\_1\ X0\ (k10\_finseq\_1\ X1\ X2) = k9\_margrel1\ (k10\_margrel1\ (k9\_margrel1\ X1)\ X2)))))) \tag{5}$$

Assume the following.

$$\forall X0.((v1\_funct\_1\ X0)\wedge((v1\_funct\_2\ X0\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1)))))\Rightarrow((X0 = k5\_twoscomp)\Leftrightarrow(\forall X1.(m1\_subset\_1\ X1\ k6\_margrel1)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ k6\_margrel1)\Rightarrow(k1\_funct\_1\ X0\ (k10\_finseq\_1\ X1\ X2) = k9\_margrel1\ (k10\_margrel1\ X1\ X2)))))) \tag{6}$$

**Theorem 1**

$$\forall X0.(m1\_subset\_1\ X0\ k6\_margrel1)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ k6\_margrel1)\Rightarrow((k1\_funct\_1\ k5\_twoscomp\ (k10\_finseq\_1\ X0\ X1) = k9\_margrel1\ (k10\_margrel1\ X0\ X1))\wedge((k1\_funct\_1\ k6\_twoscomp\ (k10\_finseq\_1\ X0\ X1) = k9\_margrel1\ (k10\_margrel1\ (k9\_margrel1\ X0)\ X1))\wedge(k1\_funct\_1\ k7\_twoscomp\ (k10\_finseq\_1\ X0\ X1) = k9\_margrel1\ (k10\_margrel1\ (k9\_margrel1\ X0)\ (k9\_margrel1\ X1))))))$$