# t24_chord (TMS67kks3D5wFe7HHPpxSdFg7ZwcKXffckY)

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Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finset\_1 : \iota \Rightarrow o$ be given. Let $v1\_glib\_000 : \iota \Rightarrow o$ be given. Let $r5\_glib\_000 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m3\_glib\_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v8\_glib\_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_glib\_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2\_glib\_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3\_glib\_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4\_glib\_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5\_glib\_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v6\_glib\_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v4\_relat\_1\ X0\ k5\_numbers) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finset\_1\ X0) \wedge (v1\_glib\_000\ X0))))) \Rightarrow (\forall X1.((v1\_relat\_1\ X1) \wedge ((v4\_relat\_1\ X1\ k5\_numbers) \wedge ((v1\_funct\_1\ X1) \wedge ((v1\_finset\_1\ X1) \wedge (v1\_glib\_000\ X1))))) \Rightarrow (\forall X2.(m3\_glib\_001\ X2\ X0) \Rightarrow (\forall X3.(m3\_glib\_001\ X3\ X1) \Rightarrow (((r5\_glib\_000\ X0\ X1) \wedge (X2 = X3)) \Rightarrow (((v1\_glib\_001\ X2\ X0) \Rightarrow (v1\_glib\_001\ X3\ X1)) \wedge (((v1\_glib\_001\ X3\ X1) \Rightarrow (v1\_glib\_001\ X2\ X0)) \wedge (((v2\_glib\_001\ X2\ X0) \Rightarrow (v2\_glib\_001\ X3\ X1)) \wedge (((v2\_glib\_001\ X3\ X1) \Rightarrow (v2\_glib\_001\ X2\ X0)) \wedge (((v3\_glib\_001\ X2\ X0) \Rightarrow (v3\_glib\_001\ X3\ X1)) \wedge (((v3\_glib\_001\ X3\ X1) \Rightarrow (v3\_glib\_001\ X2\ X0)) \wedge (((v4\_glib\_001\ X2\ X0) \Rightarrow (v4\_glib\_001\ X3\ X1)) \wedge (((v4\_glib\_001\ X3\ X1) \Rightarrow (v4\_glib\_001\ X2\ X0)) \wedge (((v5\_glib\_001\ X2\ X0) \Rightarrow (v5\_glib\_001\ X3\ X1)) \wedge (((v5\_glib\_001\ X3\ X1) \Rightarrow (v5\_glib\_001\ X2\ X0)) \wedge (((v6\_glib\_001\ X2\ X0) \Rightarrow (v6\_glib\_001\ X3\ X1)) \wedge ((v6\_glib\_001\ X3\ X1) \Rightarrow (v6\_glib\_001\ X2\ X0)))))))))))))))) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v4\_relat\_1\ X0\ k5\_numbers) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finset\_1\ X0) \wedge (v1\_glib\_000\ X0))))) \Rightarrow (\forall X1.(m3\_glib\_001\ X1\ X0) \Rightarrow ((v8\_glib\_001\ X1\ X0) \Leftrightarrow ((v1\_glib\_001\ X1\ X0) \wedge ((v5\_glib\_001\ X1\ X0) \wedge (\neg v3\_glib\_001\ X1\ X0))))) \tag{2}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v4\_relat\_1\ X0\ k5\_numbers)\wedge((v1\_funct\_1\ X0)\wedge((v1\_finset\_1\ X0)\wedge(v1\_glib\_000\ X0)))))\Rightarrow(\forall X1.(m3\_glib\_001\ X1\ X0)\Rightarrow((v8\_glib\_001\ X1\ X0)\Rightarrow((v1\_glib\_001\ X1\ X0)\wedge((\neg v3\_glib\_001\ X1\ X0)\wedge(v5\_glib\_001\ X1\ X0)))))) \tag{3}$$

**Theorem 1**

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v4\_relat\_1\ X0\ k5\_numbers)\wedge((v1\_funct\_1\ X0)\wedge((v1\_finset\_1\ X0)\wedge(v1\_glib\_000\ X0)))))\Rightarrow(\forall X1.((v1\_relat\_1\ X1)\wedge((v4\_relat\_1\ X1\ k5\_numbers)\wedge((v1\_funct\_1\ X1)\wedge((v1\_finset\_1\ X1)\wedge(v1\_glib\_000\ X1)))))\Rightarrow((r5\_glib\_000\ X0\ X1)\Rightarrow(\forall X2.(m3\_glib\_001\ X2\ X0)\Rightarrow(\forall X3.(m3\_glib\_001\ X3\ X1)\Rightarrow(((X2 = X3)\wedge(v8\_glib\_001\ X2\ X0))\Rightarrow(v8\_glib\_001\ X3\ X1))))))$$