t103_chord (TMU8mynVpZf1Ap7SwDHRhhJHqSXmqKciHHZ)

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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 $v2\_glib\_000 : \iota \Rightarrow o$ be given. Let $v6\_chord : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_glib\_000 : \iota \Rightarrow \iota$ be given. Let $v3\_chord : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2\_chord : \iota \Rightarrow o$ be given. Let $v4\_glib\_000 : \iota \Rightarrow o$ be given. Let $r1\_chord : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v4\_relat\_1\ X0\ k5\_numbers) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finset\_1\ X0) \wedge ((v1\_glib\_000\ X0) \wedge (v2\_chord\ X0)))))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k6\_glib\_000\ X0)) \Rightarrow (v3\_chord\ X1\ X0)) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v4\_relat\_1\ X0\ k5\_numbers) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finset\_1\ X0) \wedge ((v1\_glib\_000\ X0) \wedge ((v2\_glib\_000\ X0) \wedge ((\neg v4\_glib\_000\ X0) \wedge (v6\_chord\ X0)))))))) \Rightarrow (\neg(\neg v2\_chord\ X0) \wedge (\forall X1.(m1\_subset\_1\ X1\ (k6\_glib\_000\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k6\_glib\_000\ X0)) \Rightarrow (\neg(X1 \neq X2) \wedge ((\neg r1\_chord\ X0\ X1\ X2) \wedge ((v3\_chord\ X1\ X0) \wedge (v3\_chord\ X2\ X0))))))) \tag{2}$$

Assume the following.

$$\forall X0.\exists X1.m1\_subset\_1\ X1\ X0 \tag{3}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v4\_relat\_1\ X0\ k5\_numbers) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finset\_1\ X0) \wedge ((v1\_glib\_000\ X0) \wedge (v4\_glib\_000\ X0)))))) \Rightarrow ((v1\_relat\_1\ X0) \wedge ((v4\_relat\_1\ X0\ k5\_numbers) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finset\_1\ X0) \wedge ((v1\_glib\_000\ X0) \wedge (v2\_chord\ X0)))))) \tag{4}$$

Theorem 1

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v4\_relat\_1\ X0\ k5\_numbers) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finset\_1\ X0) \wedge ((v1\_glib\_000\ X0) \wedge ((v2\_glib\_000\ X0) \wedge (v6\_chord\ X0))))))) \Rightarrow (\exists X1.(m1\_subset\_1\ X1\ (k6\_glib\_000\ X0)) \wedge (v3\_chord\ X1\ X0))$$