

# t56\_sublemma (TMWuqddm- mYqKjTsB5yYWPfzt5RzWEbX8bF1)

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Let  $m1\_qc\_lang1 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_qc\_lang1 : \iota \Rightarrow \iota$  be given. Let  $k3\_qc\_lang1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m1\_valuat\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m2\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_valuat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k16\_subst1 : \iota \Rightarrow \iota$  be given. Let  $k38\_subst1 : \iota \Rightarrow \iota$  be given. Let  $m1\_subst1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_sublemma : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_subst1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_sublemma : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_sublemma : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k12\_sublemma : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k35\_subst1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k32\_subst1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_sublemma : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k14\_sublemma : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k13\_sublemma : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_valuat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_sublemma : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k1\_funct\_4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_cqc\_lang : \iota \Rightarrow \iota$  be given. Let  $k11\_cqc\_lang : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k15\_qc\_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_subst1 : \iota \Rightarrow \iota$  be given. Let  $v1\_sublemma : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k9\_qc\_lang1 : \iota \Rightarrow \iota$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $k7\_subst1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_subst1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(m1\_qc\_lang1 X0) \Rightarrow (\forall X1.(m2\_subset\_1 X1 (k2\_qc\_lang1 \\
 & \quad X0) (k3\_qc\_lang1 X0)) \Rightarrow (\forall X2.(\neg v1\_xboole\_0 X2) \Rightarrow (\forall X3. \\
 & \quad (m2\_funct\_2 X3 (k3\_qc\_lang1 X0) X2 (k2\_valuat\_1 X0 X2)) \Rightarrow (\forall X4. \\
 & \quad (m2\_subset\_1 X4 (k16\_subst1 X0) (k38\_subst1 X0)) \Rightarrow (\forall X5. \\
 & \quad (m1\_subst1 X5 X0 (k7\_sublemma X0 X4 X1)) \Rightarrow ((v3\_subst1 (k7\_sublemma \\
 & \quad \quad X0 X4 X1) X0) \Rightarrow (\forall X6.(m1\_subset\_1 X6 X2) \Rightarrow (r2\_relset\_1 (k3\_qc\_lang1 \\
 & \quad X0) X2 (k13\_sublemma X0 X4 X1 X5 X2 (k1\_sublemma X0 X2 X3 (k12\_sublemma \\
 & \quad \quad X0 X2 (k35\_subst1 X0 (k32\_subst1 X0 (k9\_sublemma X0 (k7\_sublemma \\
 & \quad \quad \quad X0 X4 X1) X5))) X6))) (k13\_sublemma X0 X4 X1 X5 X2 X3))))))))) \\
 & \hspace{15em} (1)
 \end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))\wedge(m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))))\Rightarrow((r2\_relset\_1 X0 X1 X2 X3)\Leftrightarrow(X2 = X3)) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0 X0)\wedge((\neg v1\_xboole\_0 X1)\wedge(m1\_subset\_1 X1 (k1\_zfmisc\_1 X0))))\Rightarrow(\forall X2.(m2\_subset\_1 X2 X0 X1)\Leftrightarrow(m1\_subset\_1 X2 X1)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0 X1)\wedge(m1\_funct\_2 X2 X0 X1))\Rightarrow(\forall X3.(m2\_funct\_2 X3 X0 X1 X2)\Leftrightarrow(m1\_subset\_1 X3 X2)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_qc\_lang1 X0)\wedge((m1\_subset\_1 X1 (k38\_subst1 X0))\wedge(m1\_subset\_1 X2 (k3\_qc\_lang1 X0))))\Rightarrow(k7\_sublemma X0 X1 X2 = k4\_tarski X1 X2) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((m1\_qc\_lang1 X0)\wedge(\neg v1\_xboole\_0 X1))\Rightarrow(k2\_valuat\_1 X0 X1 = k1\_valuat\_1 X0 X1) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((m1\_qc\_lang1 X0)\wedge(m1\_subset\_1 X1 (k38\_subst1 X0)))\Rightarrow(k2\_sublemma X0 X1 = k1\_xtuple\_0 X1) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((m1\_qc\_lang1 X0)\wedge((\neg v1\_xboole\_0 X1)\wedge((m1\_subset\_1 X2 (k2\_valuat\_1 X0 X1))\wedge((v1\_funct\_1 X3)\wedge(m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k3\_qc\_lang1 X0) X1)))))))\Rightarrow(k1\_sublemma X0 X1 X2 X3 = k1\_funct\_4 X2 X3) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_qc\_lang1 X0)\wedge((m1\_subset\_1 X1 (k3\_qc\_lang1 X0))\wedge(m1\_subset\_1 X2 (k3\_cqc\_lang X0))))\Rightarrow(k11\_cqc\_lang X0 X1 X2 = k15\_qc\_lang1 X0 X1 X2) \quad (9)$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1 X0)\Rightarrow(\neg v1\_xboole\_0 (k38\_subst1 X0)) \quad (10)$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1 X0) \Rightarrow (\neg v1\_xboole\_0 (k3\_qc\_lang1 X0)) \quad (11)$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1 X0) \Rightarrow (\neg v1\_xboole\_0 (k2\_qc\_lang1 X0)) \quad (12)$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1 X0) \Rightarrow (\neg v1\_xboole\_0 (k3\_cqc\_lang X0)) \quad (13)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge \\ (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2.(m2\_subset\_1 \\ X2 X0 X1) \Rightarrow (m1\_subset\_1 X2 X0)) \end{aligned} \quad (14)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0 X1) \wedge (m1\_funct\_2 \\ X2 X0 X1)) \Rightarrow (\forall X3.(m2\_funct\_2 X3 X0 X1 X2) \Rightarrow ((v1\_funct\_1 X3) \wedge \\ ((v1\_funct\_2 X3 X0 X1) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ X0 X1)))))) \end{aligned} \quad (15)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((m1\_qc\_lang1 X0) \wedge (m1\_subset\_1 X1 (k2\_zfmisc\_1 \\ (k16\_subst1 X0) (k3\_qc\_lang1 X0)))) \Rightarrow (\forall X2.(m1\_subst1 \\ X2 X0 X1) \Rightarrow (m1\_subset\_1 X2 (k1\_subst1 X0))) \end{aligned} \quad (16)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.((m1\_qc\_lang1 X0) \wedge ((v1\_sublemma \\ X1 X0) \wedge (m1\_subset\_1 X1 (k2\_zfmisc\_1 (k16\_subst1 X0) (k3\_qc\_lang1 \\ X0)))) \wedge (m1\_subst1 X2 X0 X1)) \Rightarrow (m2\_subset\_1 (k9\_sublemma X0 \\ X1 X2) (k16\_subst1 X0) (k38\_subst1 X0)) \end{aligned} \quad (17)$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1 X0) \Rightarrow (\neg v1\_xboole\_0 (k9\_qc\_lang1 X0)) \quad (18)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.\forall X3.((m1\_qc\_lang1 X0) \wedge \\ ((m1\_subset\_1 X1 (k3\_qc\_lang1 X0)) \wedge ((m1\_subset\_1 X2 (k9\_qc\_lang1 \\ X0)) \wedge (m1\_subset\_1 X3 (k1\_subst1 X0)))))) \Rightarrow ((v1\_finset\_1 (k7\_subst1 \\ X0 X1 X2 X3)) \wedge (m1\_subset\_1 (k7\_subst1 X0 X1 X2 X3) (k1\_subst1 \\ X0))) \end{aligned} \quad (19)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((m1\_qc\_lang1\ X0)\wedge(m1\_subset\_1 \\ & X1\ (k38\_subst1\ X0))\wedge(m1\_subset\_1\ X2\ (k3\_qc\_lang1\ X0)))\Rightarrow(( \\ & v1\_sublemma\ (k7\_sublemma\ X0\ X1\ X2)\ X0)\wedge(m1\_subset\_1\ (k7\_sublemma \\ & X0\ X1\ X2)\ (k2\_zfmisc\_1\ (k16\_subst1\ X0)\ (k3\_qc\_lang1\ X0)))) \end{aligned} \quad (20)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ & ((m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\wedge(m1\_subset\_1 \\ & X5\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X2\ X3))))\Rightarrow(m1\_subset\_1\ (k4\_relset\_1 \\ & X0\ X1\ X2\ X3\ X4\ X5)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X3))) \end{aligned} \quad (21)$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0)\Rightarrow(m1\_subset\_1\ (k3\_qc\_lang1\ X0)\ (k1\_zfmisc\_1\ (k2\_qc\_lang1\ X0))) \quad (22)$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0)\Rightarrow(m1\_subset\_1\ (k3\_cqc\_lang\ X0)\ (k1\_zfmisc\_1\ (k9\_qc\_lang1\ X0))) \quad (23)$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0)\Rightarrow(m1\_subset\_1\ (k38\_subst1\ X0)\ (k1\_zfmisc\_1\ (k16\_subst1\ X0))) \quad (24)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((m1\_qc\_lang1\ X0)\wedge(m1\_subset\_1\ X1\ (k2\_zfmisc\_1 \\ & (k9\_qc\_lang1\ X0)\ (k1\_subst1\ X0))))\Rightarrow(m2\_subset\_1\ (k35\_subst1 \\ & X0\ X1)\ (k2\_qc\_lang1\ X0)\ (k3\_qc\_lang1\ X0)) \end{aligned} \quad (25)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((m1\_qc\_lang1\ X0)\wedge(m1\_subset\_1\ X1\ (k16\_subst1 \\ & X0)))\Rightarrow(m1\_subset\_1\ (k32\_subst1\ X0\ X1)\ (k2\_zfmisc\_1\ (k9\_qc\_lang1 \\ & X0)\ (k1\_subst1\ X0))) \end{aligned} \quad (26)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((m1\_qc\_lang1\ X0)\wedge(\neg v1\_xboole\_0\ X1))\Rightarrow \\ & (m1\_funct\_2\ (k2\_valuat\_1\ X0\ X1)\ (k3\_qc\_lang1\ X0)\ X1) \end{aligned} \quad (27)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((m1\_qc\_lang1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_subst1 \\ & X0)))\Rightarrow((v1\_funct\_1\ (k2\_subst1\ X0\ X1))\wedge(m1\_subset\_1\ (k2\_subst1 \\ & X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k3\_qc\_lang1\ X0)\ (k3\_qc\_lang1 \\ & X0)))))) \end{aligned} \quad (28)$$

Assume the following.

$$\forall X0.\forall X1.((m1\_qc\_lang1\ X0)\wedge(m1\_subset\_1\ X1\ (k38\_subst1\ X0)))\Rightarrow(m2\_subset\_1\ (k2\_sublemma\ X0\ X1)\ (k9\_qc\_lang1\ X0)\ (k3\_qc\_lang\ X0)) \quad (29)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((m1\_qc\_lang1\ X0)\wedge((\neg v1\_xboole\_0\ X1)\wedge((m1\_subset\_1\ X2\ (k2\_valuat\_1\ X0\ X1))\wedge((v1\_funct\_1\ X3)\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k3\_qc\_lang1\ X0)\ X1))))))\Rightarrow(m2\_funct\_2\ (k1\_sublemma\ X0\ X1\ X2\ X3)\ (k3\_qc\_lang1\ X0)\ X1\ (k2\_valuat\_1\ X0\ X1)) \quad (30)$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0)\Rightarrow(\neg v1\_xboole\_0\ (k16\_subst1\ X0)) \quad (31)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_qc\_lang1\ X0)\wedge((m1\_subset\_1\ X1\ (k3\_qc\_lang1\ X0))\wedge(m1\_subset\_1\ X2\ (k9\_qc\_lang1\ X0))))\Rightarrow(m1\_subset\_1\ (k15\_qc\_lang1\ X0\ X1\ X2)\ (k9\_qc\_lang1\ X0)) \quad (32)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5.((m1\_qc\_lang1\ X0)\wedge((m1\_subset\_1\ X1\ (k38\_subst1\ X0))\wedge((m1\_subset\_1\ X2\ (k3\_qc\_lang1\ X0))\wedge((m1\_subset1\ X3\ X0\ (k7\_sublemma\ X0\ X1\ X2))\wedge((\neg v1\_xboole\_0\ X4)\wedge(m1\_subset\_1\ X5\ (k2\_valuat\_1\ X0\ X4))))))\Rightarrow((v1\_funct\_1\ (k13\_sublemma\ X0\ X1\ X2\ X3\ X4\ X5))\wedge(m1\_subset\_1\ (k13\_sublemma\ X0\ X1\ X2\ X3\ X4\ X5)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k3\_qc\_lang1\ X0)\ X4)))) \quad (33)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((m1\_qc\_lang1\ X0)\wedge((\neg v1\_xboole\_0\ X1)\wedge((m1\_subset\_1\ X2\ (k3\_qc\_lang1\ X0))\wedge(m1\_subset\_1\ X3\ X1))))\Rightarrow((v1\_funct\_1\ (k12\_sublemma\ X0\ X1\ X2\ X3))\wedge(m1\_subset\_1\ (k12\_sublemma\ X0\ X1\ X2\ X3)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k3\_qc\_lang1\ X0)\ X1)))) \quad (34)$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m2\_subset\_1\ X1\ (k16\_subst1 \\
& \quad X0)\ (k38\_subst1\ X0)) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ (k2\_qc\_lang1 \\
& \quad X0)\ (k3\_qc\_lang1\ X0)) \Rightarrow (\forall X3.(m1\_subst1\ X3\ X0\ (k7\_sublemma \\
& \quad X0\ X1\ X2)) \Rightarrow (\forall X4.(\neg v1\_xboole\_0\ X4) \Rightarrow (\forall X5.(m2\_funct\_2 \\
& \quad X5\ (k3\_qc\_lang1\ X0)\ X4\ (k2\_valuat\_1\ X0\ X4)) \Rightarrow (k13\_sublemma\ X0\ X1 \\
& \quad X2\ X3\ X4\ X5 = k4\_relset\_1\ (k3\_qc\_lang1\ X0)\ (k3\_qc\_lang1\ X0)\ (k3\_qc\_lang1 \\
& \quad X0)\ X4\ (k2\_subst1\ X0\ (k7\_subst1\ X0\ X2\ (k11\_cqc\_lang\ X0\ X2\ (k2\_sublemma \\
& \quad X0\ X1))\ X3))\ X5))))))
\end{aligned} \tag{35}$$

**Theorem 1**

$$\begin{aligned}
& \forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m2\_subset\_1\ X1\ (k2\_qc\_lang1 \\
& \quad X0)\ (k3\_qc\_lang1\ X0)) \Rightarrow (\forall X2.(\neg v1\_xboole\_0\ X2) \Rightarrow (\forall X3. \\
& \quad (m1\_valuat\_1\ X3\ X0\ X2) \Rightarrow (\forall X4.(m2\_funct\_2\ X4\ (k3\_qc\_lang1 \\
& \quad X0)\ X2\ (k2\_valuat\_1\ X0\ X2)) \Rightarrow (\forall X5.(m2\_subset\_1\ X5\ (k16\_subst1 \\
& \quad X0)\ (k38\_subst1\ X0)) \Rightarrow (\forall X6.(m1\_subst1\ X6\ X0\ (k7\_sublemma \\
& \quad X0\ X5\ X1)) \Rightarrow ((v3\_subst1\ (k7\_sublemma\ X0\ X5\ X1)\ X0) \Rightarrow ((\forall X7. \\
& \quad (m1\_subset\_1\ X7\ X2) \Rightarrow (r1\_sublemma\ X0\ X5\ X2\ (k1\_sublemma\ X0\ X2\ (k1\_sublemma \\
& \quad X0\ X2\ X4\ (k12\_sublemma\ X0\ X2\ (k35\_subst1\ X0\ (k32\_subst1\ X0\ (k9\_sublemma \\
& \quad X0\ (k7\_sublemma\ X0\ X5\ X1)\ X6)))\ X7))\ (k14\_sublemma\ X0\ X2\ (k13\_sublemma \\
& \quad X0\ X5\ X1\ X6\ X2\ (k1\_sublemma\ X0\ X2\ X4\ (k12\_sublemma\ X0\ X2\ (k35\_subst1 \\
& \quad X0\ (k32\_subst1\ X0\ (k9\_sublemma\ X0\ (k7\_sublemma\ X0\ X5\ X1)\ X6))) \\
& \quad X7)))\ (k12\_sublemma\ X0\ X2\ X1\ X7)))\ X3)) \Leftrightarrow (\forall X7.(m1\_subset\_1 \\
& \quad X7\ X2) \Rightarrow (r1\_sublemma\ X0\ X5\ X2\ (k1\_sublemma\ X0\ X2\ (k1\_sublemma\ X0\ X2 \\
& \quad X4\ (k12\_sublemma\ X0\ X2\ (k35\_subst1\ X0\ (k32\_subst1\ X0\ (k9\_sublemma \\
& \quad X0\ (k7\_sublemma\ X0\ X5\ X1)\ X6)))\ X7))\ (k14\_sublemma\ X0\ X2\ (k13\_sublemma \\
& \quad X0\ X5\ X1\ X6\ X2\ X4)\ (k12\_sublemma\ X0\ X2\ X1\ X7)))\ X3))))))
\end{aligned}$$