② Intégration de var_{A_0} suivant $v = D0$

Evaluation avec la variable $\underline{v}$ correspondant à $\int \frac{1}{v-a}$

Remplace var_{A_0} par son intégrale

conserve A5

```
XNTG :MOVE.L  A5,-(SP)
      MOVEM.L D0/A0/A6,-(SP)
      BSR   XFFCT1          factorise
      BSR   XRED2  <-{MOVEQ #+1,D3   sont les x^α
      BSR   XREDQ    si ≠ polynome de degré 2   cherche facteur
KH75 :BSR   XPSF0          met ∫ = 0
      MOVE.L A2,8(SP)
KH76 :MOVE  (A0)+,D6       cherche le 1er facteur négatif contenant v
      SUBQ  #2,D6
      BMI   KH79           → abset
      BSR   SLNG0
      ADD   D0,A0
      MOVE.L (SP),D0
KH77 :MOVE.L (A0)+,D4
      MOVE.L A0,A1
      ADD.L  D4,A1
      TST   -2(A1)
      BPL   KH78           → facteur positif
      BSR   XDEG           D5 = degré du polynome
      CMP   #1,D5
      BCC   KH82           contient v
KH78 :MOVE.L A1,A0
      DBRA  D6,KH77
KH79 :MOVEM.L (SP),D0/A0   var A0 n'a plus de pole
      BSR   XPSF           recopie var A0
      MOVE.L A2,A0
      BSR   XFRD ⑤38       transforme en forme developpée
      BSR   XFFCT1         factorise
      BSR   XRED2
```

v
M
S
A5

```
⊗ MOVE.L A0,A2
  BSR XTPOLY
  BEQ KH75
```

M	S

répète XNTG2

(2)

```
MOVE.L  (SP)+,D0      v
BSR     XNTG2         var_A0 = ∫M
MOVE.L  A0,A1
MOVEM.L (SP),D0/A0    bida  S
BSR     XADDF         S + ∫M
MOVE.L  A0,A2
MOVE.L  (SP),A0
BSR     XLB76
MOVEM.L (SP)+,A0/A1/A5   bida
RTS
```

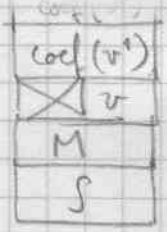
x KH82: BEQ KH83 — de degré 1

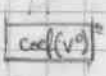
```
        MOVE #31,D0
        BRA  RER
```

KH83: MOVEQ #1,D1 — determine pole

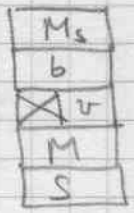
$b = \frac{-coef_0(v^0)}{coef_1(v^1)}$

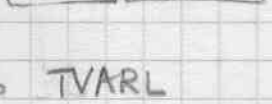
```
        BSR  XCOEFP
        MOVE.L A2,-(SP)   coef v^1
        CLR  D1
        BSR  XCOEFP       coef de v^0
        MOVE.L A2,A0
        MOVE.L 12(SP),A0
        BSR  XPSF         recopie M
        MOVE.L (SP)+,A0   coeff^0
        MOVEM.L A2/A6,-(SP)
        BSR  XPSAF1       factorisé coef(v^0)
        MOVE.L (SP)+,A0
        MOVE.L A2,-(SP)
        BSR  XPSAF1       factorisé de coef(v^1)
        MOVE.L A2,A1
        BCHG #7,2(A1)     chg signe
        MOVE.L (SP),A0
        BSR  XDIVF        en A0: b
        MOVEM.L (SP),D0/D1/A0   bida  M
        BSR  XPSF         recopie M
        MOVE.L (SP),A0    b
        MOVE.L A2,-(SP)
        BSR  XPSF         recopie b
```





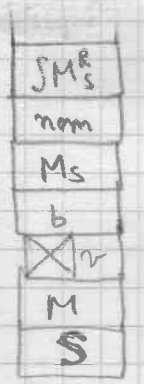
```
MOVE.L  A2,A1          b^R
MOVEM.L (SP),A0/A2/A3
MOVE    A3,D0          v
MOVE    D0,D2          variable de develop X = v
                       X
BSR     XPSING         Sort la partie singulière Ms
BSR     XPSF           recopiée
MOVE.L  A2,A0
MOVE    10(SP),D0      v = X
MOVE    TVARL,D2       libre pour Lv si necessaire
BSR     XNTG2          remplace par ∫ Ms^R
MOVEM.L A0/A6,-(SP)
TST.L   D2
BPL     KH87 → Lv inutilisé
```





création du littéral Lv de numéro TVARL

```
MOVE.L  A0/A6,-(SP)    SM_S^R
MOVE.L  8(SP),A0       b
MOVE    #"L(",(A6)+
BSR     XPRTAF         chaîne pour b
MOVE.L  A0,A1
MOVE    #80,D1
MOVE.L  #"LOG(",(A6)+
MOVE.L  A6,A0
MOVE    18(SP),D2      v
BSR     XFLIT
MOVE.L  A0,A6
MOVE.B  #")",-(A0)
MOVE.B  #")",(A6)
MEVEN   A6
MOVE.L  12(SP),A0      b
BSR     XPRTAF         chaîne pour b
```



(2)

```
        MOVE.L  A0,A5
        BSR     DECCRM          signe - ?
        BNE     KH84  → ici D1="-"
        MOVE    #"+",D1
KH84 :  MOVE.B  D1,-(A5)
        MOVEM.L (SP),D0/A5      début chaine
        ...
        MOVE    #20,D1          au plus 25 car
KH85 :  NEXTA5
        MOVE.B  (A5)+,(A0)+     ← VERA0   D0   → fi
        DBEQ    D1, KH85
        SUBQ    #1, A0
        BEQ     KH86
        MOVE.   #".",D0
        MOVE.B  D0,(A0)+
        //
        //
KH86 :  MOVE.B #")",(A0)+
        CLR.B   (A0)+
        VERA0
        MOVE    #$10,D0         type littéral
        BSR     WNW             inscription
```

TMNOM

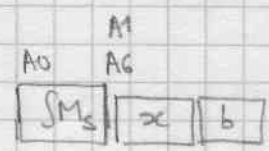
```
MOVE.L  TVARF,A0
ADDQ    #1,A0   CLR.B (A0)
MOVE.L  A0,A1
```

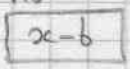
(X)

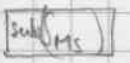
```
MOVE.L  #TMIND+4,D1      ⊗

KH860:MOVE.L    D2,A3
      MOVE.L    -(A3),D2
      BNE       KH860
      MOVE      #$10,D0        type lifted
      BSR       WNW            inscription
```

```
KH87 :MOVEM.L  (SP), A0/A6
      MOVE.L   A6, A1
      MOVE     18(SP), D2      oříznu x-b
      BSR      LB160
      MOVE.L   12(SP), A0      b
      BSR      XPSF            b recopié
      MOVE.L   A2, A0
      ADDQ     #2, A2
      CHGS
      EXG      A0, A1          x  b
      BSR      XADDF
      MOVE.L   (SP), A1        SMs
      EXG      A0, A1
               SMs  x=b
      MOVE     18(SP), D0
      BSR      XSUBS
      MOVEM.L  A0/A6, (SP)
```







(2) ~~MOVE.L A0,A1~~ SM

KH87: ~~MOVEM.L~~ (SP)+, A1/A6 (ok)

MOVE.L 16(SP), A0 S

BSR XPSF recopié

MOVE.L A2, A0

EXG A0, A1

BSR XADDF

MOVEM.L A0/A6, -(SP)

MOVE 18(SP), D2 création de x−b

BSR LB160 x factorisé

MOVE.L 12(SP), A0 b

BSR XPSF b recopié

MOVE.L A2, A0 b ← { ADDQ #2, A2 −b / CHGS

EXG A0, A1 x

BSR XADDF

MOVE.L 4(SP), A1 M_S®

EXG A0, A1 M_S® x−b

MOVE 18(SP), D0

BSR XSUBS

~~BCHG~~ #7, 2(A0) ⊗

MOVE.L 20(SP), A0 M

BSR XPSF M recopié

MOVE.L A2, A1 M®

MOVEM.L (SP), D0/A0 vide - subs

BSR XADDF

MOVE.L (SP)+, A0 S'

BSR XPSF recopié

MOVE.L A2, A3

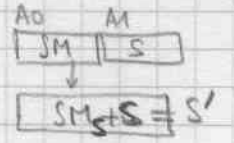
MOVE.L A6, A4

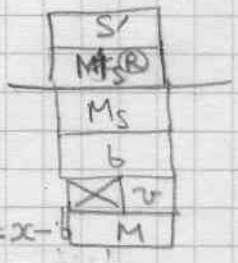
MOVEM.L (SP)+, A2/A5/A6 vide

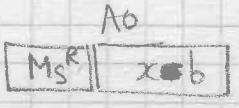
MOVE.L A3, A6

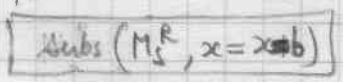
MOVEM.L (SP), D0/A0

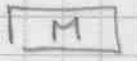
{ MOVE.L 8(SP), A0 M_S / BSR XPSF recopié / MOVE.L A6, A1

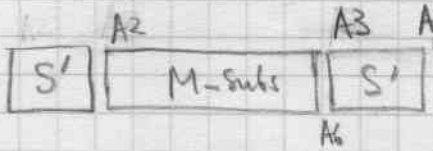












(2)

```
BSR   XLB76
MOVE.L  A0,8(SP)
MOVE.L  A4,A6
BSR   XLB76
MOVEM.L  (SP),D0/A0
BRA   KH76
```