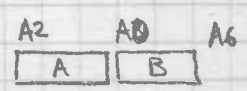


10) Entrée $P_{A_0} = f(x, \dots, z) \in \mathbb{Z}[x, \dots, z]$

$f(x, \dots, z)$ vérifie la condition a-c 1095 et en plus
d) f n'est pas homogène
e) f dépend de plus de 2 littéraux

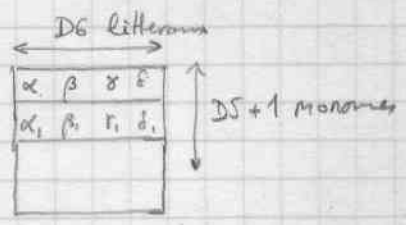
Sortie $D_0 = -1$ f est irréductible A_6 inchangé

$D_0 = 0$ $f = A + B$ A et B irréductibles
 $D_0 = 1$ $f = A * B$ A seul irréductible



XJFF: BSR XJPANY

A2: table des exposants



F1 (a)
 $\exists ?$ littéral de degré 1

```
MOVE.L A2, A3
MOVE D6, D4
ADD D4, D4
MOVE D6, D3
SUBQ #1, D3
```

boucle sur les littéraux

```
MK54: MOVE.L A3, A1
ADDQ #2, A3
MOVE D5, D0
```

boucle sur les monomes

```
MK55: CMP #2, (A1)
BCC MK56
ADD D4, A1
```

\rightarrow degré ≥ 2

```
MK55: DBRA D0, MK55
MOVEQ #-1, D0
MOVE.L A2, A6
RTS
```

le degré est ~~1~~ pour ce littéral

S1 ($D_0.W = -1$)

```
MK56: DBRA D3, MK54
```

MOVE D6, D4

BSR ANALDG @114 D3.L = m D4: x (essai)
A1 : liste des yi

MKS
MOVEM.L D3/A1, -(SP)
BRA MK59

MK57: BSR ANALDG ← MOVE.L A1, A6

CMP.L (SP), D3

BCC MK59

cas le nouveau D3 est meilleur

~~MOVE (SP)~~

MOVE.L 8(SP), A6

MOVE D6, D0
SUBQ #1, D0

MK58: MOVE (A1)+, (A6)+

DBRA D0, MK58

MK59: ~~BSR~~ #1, D4

BNE MK57

MOVEM.L (SP)+, D3/D4/A1 ^{liste yi}

CMP.L #FFFFFF, D3

BCC MK550 → retour si D3 trop grand

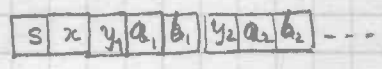
```

MOVE.L A0/A2, -(SP)
MOVE.L A6, -(SP)

```

P_{A0} = poly
A1: liste des
y
D4: x

Structure des transformations

$$\left. \begin{aligned}
 y_1 &= y_1 + a_1 x + b_1 \\
 y_2 &= y_2 + a_2 x + b_2 \\
 &\dots \\
 y_s &= y_s + a_s x + b_s
 \end{aligned} \right\} s \text{ variable}$$


```

ADD D4, D4
SUBQ #1, D6
MOVE D6, (A6)+
MOVE (A0, D4.W), (A6)+ x
ADDQ #2, A0

```

```

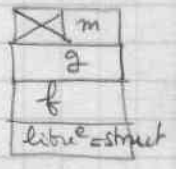
MK60: ... D0 y
MOVE (A1)+, D1      saut
BMI MK61           saute x
MOVE D0, (A6)+     yi
MOVE D1, (A6)+     ai = { 0
CLR (A6)+          bi = 0

```

```

MK61: DBRA D6, MK60
MOVE.L A2, A0
MOVE.L (SP)+, A2
BSR XLB76
MOVE.L (SP), A0 f
MOVE.L D3/A6, -(SP)

```



```

BSR XPSAP
MOVE.L A2, A0 ← g = pA0
MOVE.L 12(SP), A1 struct
MOVE (A1)+, D6 1
SUBQ #1, D6
MOVE (A1), D2 x

```

F1 C2

boucle i=1...1

10

Mk62: ADDQ #2, A1

Mk63: MOVE (A1)+, D0

MOVE (A1)+, D3

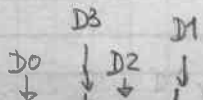
BEQ MK64
ADDQ #1, (SP)
EXT.L D3

Mk63: MOVEQ #0, D1

y_i
 a_i
 $\rightarrow a_i = 0$ ← nb de $b_i \neq 0$
 $b_i = 0$

BSR XJPSAB

remplace P_{A0} par $subs(P_{A0}, y_i = y_i + a_i x + b_i)$
conserve D2/D6/A0/A1



Mk64: DBRA D6, MK62

Mk65: MOVE D2, D0

F1 C3

BSR XDEG

D5 = degré de g en x

CMP 2(SP), D5

BEQ MK68

→ ok

MOVE #17, -(SP)

TRAP #14

ADDQ #2, SP

met D0 nb aléatoire $\in [0, n[$

} rnd

BSR MOORE ⊗

AND.L #FFFF, D0

DIVU (SP), D0

SWAP D0

MOVE.L 12(SP), A1

← MOVE.L (A1), D2 x

mettre A1 sur la D0 ⁺¹ème substitution

Mk65: ADDQ #6, A1

~~Mk65: MOVE (A1), D0~~

BEQ MK65

DBRA D0, MK65

BSR SUALT

met $D3 = \begin{cases} 1-D1 & \text{si } D1 \leq 0 \\ -D1 & \text{si } D1 > 0 \end{cases}$

MOVE D3, (A1)

nouveau a_i

SUB.L D1, D3

Δa_i

$y_i = y_i + \frac{(D3 - D1)}{\Delta a_i} x$

MOVE -(A1), D0

y_i

~~MOVEQ #0, D1~~

~~$b_i = 0$~~

MOVE.L 4(SP), A0

g

va mettre g = subs(g, $y_i = y_i + \Delta a_i x$)

BRA MK65

```

MK680: MOVE #17, -(SP)
      TRAP #14
      ADDQ #2, SP
  
```

rnd
 → BSR MOORE ⊗

```

MOVE.L 12(SP), A1
AND.L #FFFFFF, D0
  
```

structure

```

DIVU (A1)+, D0
SWAP D0
ADDQ #1, D0
MULU #6, D0
ADD D0, A1
  
```

divisi par s
 $D0 = rnd(1) = i$
 changer bi
 pointe bi

```

MOVE (A1), D1
BSR SUALT
MOVE D3, (A1)
  
```

$$D3 = \begin{cases} 1-D1 & \text{si } D1 \leq 0 \\ -D1 & \text{si } D1 > 0 \end{cases}$$

```

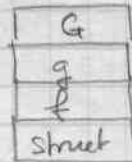
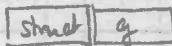
BRA MK680
  
```

```

MOVE.L #1(SP), A6
MOVE.L 4(SP), A0
  
```



MK68: MOVE.L A6, (SP)



~~MOVE.L (SP), A7~~ ⊗

BSR XPSAP G=g

MOVE.L 12(SP), A1 structure calcule $G = \text{subs}(g, y_1=b_1, y_2=b_2, \dots, y_s=b_s)$

MOVE (A1)+, D6 1

MOVE (A1)+, ~~(SP)~~ x

SUBQ #1, D6

~~MOVE D2, (SP)~~

MK69: MOVE (A1)+, D0 y_i

MOVE.L (A1)+, D1

EXT.L D1 } b_i

MOVE.L 2(SP), A0 G ⊗

MOVEM.L ~~(SP)~~/A1, -(SP) b_i

BSR XJPSCT $\psi = \text{subs}(G, y_i = D1.L)$

MOVE.L 1(SP), A0 G

BSR XLBTGR

MOVEM.L (SP)+, D6/A1

DBRA D6, MK69

MOVE (SP)+, D0 x

MOVE.L (SP), A0 $G(x)$

BSR XDVP $\frac{dG}{dx}(x)$ conserve A0

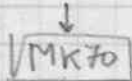
MOVE.L A2, A1

BSR XGCD $P_{A2} = \text{pgcd}(G(x), \frac{dG}{dx})$ conserve A0/A1

MOVE.L A1, A6
TST.L (A2)

~~BEQ~~

BNE MK680



~~$a_i \text{ ord}(z) = 0$ changer $\{b_i\}$~~

~~{ BSR XVAL
TST D5
BEQ MK680 }~~

x

~~$\Rightarrow \text{pgcd} = 1$~~

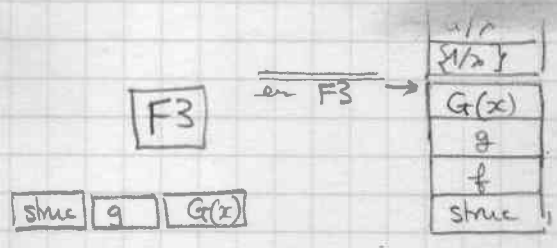
~~\rightarrow changer $\{b_1, \dots, b_s\}$~~

~~$\downarrow \text{pgcd} = 1$~~

```

MK70: MOVE.L A0, A2
      MOVE.L A1, A6
      MOVEM.L (SP)+, D2/D6/A1
      MOVE.L (SP), A0
      BSR XLB76
      DBRA D6, MK69
  
```

⊗

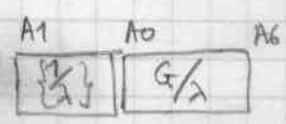


```

⊗ MK70: MOVE.L (SP), A0
  
```

```

      BSR XNORPE
      MOVE.LL A1, -(SP)
      BSR XMFINT
      CMP #2, (A2)
      BNE MK72
  
```



factorise $\frac{G}{\lambda}$
 $var_{A2} = g_1 * g_2 \dots * g_t(x)$
 $\rightarrow t > 1$
 cas $\frac{G}{\lambda}$ irréductible

```

MK71: ADD #16, SP
      MOVE.L (SP)+, A6
      MOVEQ #-1, D0
      RTS
  
```

```

MK72: MOVE.L (SP), A0
      BSR XLB76

```

calcul de $h =$
 $= \text{subs}(g, y_i = y_i + b_i, \dots)$

$h(x, y)$
$G^F(x)$
$G(x)$
$g(x, y)$
$f(x, y)$
struc

struc	$g(x, y \dots)$	$G(x)$	$G^F(x)$
-------	-----------------	--------	----------

```

MOVE.L 8(SP), A0      g(x, y)
BSR    XPSAP          h(x, y) = g(x, y)
MOVE.L A2, A0
MOVE.L A2, -(SP)
MOVE.L 20(SP), A1     structure
MOVE   (A1)+, D6      A
MOVE   (A1)+, D6      x
SUBQ   #1, D6

```

```

MK73: MOVE (A1)+, D0      y_i
MOVE.L (A1)+, D1          ⊗
EXT.L  D1                D1 ← b_i
MOVEQ  #0, D3            a_i = 0
BSR    XJPSAP
DBRA  D6, MK73

```

remplace P_{A0} par $\text{subs}(P_{A0}, y_i = y_i + b_i)$
 conserve $A0/A1/D0/D6$

← page 103.1

```

MOVE.L 4(SP), A0
MOVE (A0)+, D6
SUBQ #1, D6
MOVE D6, -(SP)
CLR -(SP)
MOVE #-1, (A6)+
MOVE.L A6, -(SP)

```

$G^F = g, * \dots * g_t$ F4

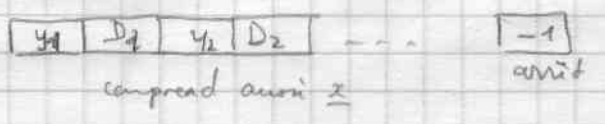
t

boucles	
m	t

-1 □ □ □ □ ..

upat
M70

table des degrés de h(x,y)



F1: MOVE.L A6, TBLDEG

MOVE.L (SP), A0 h(x,y)

MOVE.L A0, A1

MOVE (A1)+, D6 ← { MOVE.L 20(SP), A4 structure
 { ADDQ #2, A4 pointe x

V1: SUBQ #1, D6

BMI R

MOVE (A1)+, D0 y ← { CMP (A4), D0
 { BEQ V1

BSR XDEG DS = deg(h, y)

MOVEM D0/D5, (A6)+

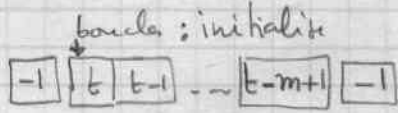
BRA V1

R: MOVE D6, (A6)+ (arrêt = -1)

```

MK75: MOVE.L (SP)+, A6      augmenter m
                             et initialiser
      MOVEM (SP), D1/D6
      MOVE D1, D0
      ADDQ #1, D1
      MOVE D1, (SP) ← MOVE.L A6, -(SP)
      ADD D1, D1           2m
      CMP D6, D1
      BLE MK76

```



fin pas de factorisation

```

ADD #12, SP
BRA MK71

```

```

MK76: MOVE D6, (A6)+
      SUBQ #1, D6
      DBRA D0, MK76
      MOVE D0, (A6)+      arrêt

```

```

MK77: BSR XPSPL
MK77: MOVE.L 12(SP), A6
      MOVE.L (SP), A3     boucles
      MOVE.L A2, -(SP)

```

F4 E1
 calcul de $A_0(x)$
 $= g_{\alpha_1} \dots g_{\alpha_m}$

BSR CALPRO remplace B_{A_2} par $A_0(x) = g_{\alpha_1} \dots g_{\alpha_m}$

Calculer $B_0(x) = G/A_0$

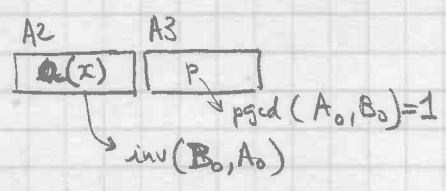
```

MOVE.L 20(SP), A0 G
MOVE.L A2, A1 A0
BSR XCTDIV err si na exact
MOVE.L A2, -(SP) B0
MOVE.L A2, A0
BSR XJP INV

```

$A_0(x)$
booles
m t
$h(x,y)$
G^F
$G(x)$
$g(x,y)$
f
struct

$H(x,y)$
$b(x)$
$a(x)$
B_0
A_0



```

MOVE.L (SP), A1 B0
MOVE.L A2, -(SP)
MOVE.L A2, A0 a(x)
MOVE.L A3, -(SP)
BSR XMULP a(x). B0
MOVE.L A2, A1
MOVE.L (SP), A0
BSR XSUBP 1 - a(x). B0(x)
MOVE.L A2, A0
MOVE.L 12(SP), A1 A0(x)
BSR XCTDIV b(x)
MOVE.L (SP), A0
BSR XLB7G

```

```

MOVEM.L 8(SP), A0/A1
BSR XMULP
MOVE.L A2, A1
MOVE.L 24(SP), A0
MOVE.L A1, -(SP)
BSR XSUBP
MOVE.L A1, A0
BSR XLB7G

```

$A_0 B_0$

$h(x,y)$

$H(x,y) = h(x,y) - A_0 B_0$

(Pourquoi ne pas prendre directement $G = A_0 B_0$?)

```

MOVE.L 32(SP), A1 G(x)
MOVE.L 24(SP), A0 h(x,y)
BSR XSUBP
MOVE.L A2, -(SP)

```

```

MOVE.L 16(SP), A0 A = A0

```

```

BSR XPSAP
MOVE.L A2, -(SP)
MOVE.L 16(SP), A0 B = B0
BSR XPSAP
MOVE.L A2, -(SP)

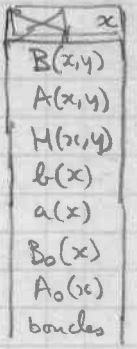
```

```

⑩ MOVE.L (A0), (SP)
MK80: MOVE.L 20(SP), A0
      MOVE.L (A0), -(SP)
M80: MOVE.L 12(SP), A0

```

F4 E2

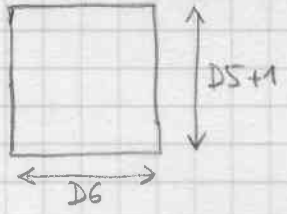


```

BSR XJPANY
MOVE.L (SP), D1

```

A2: table des exposants de H



```

MOVE (A0)+, D0
SUBQ #1, D0

```



```

MK81: CMP (A0)+, D1
      DBRA D0, MK81
      MOVE D0, (SP)
      MOVEM.L D5/D6/A2, -(SP)
      MOVE.L A2, A1

```

D0 = indique la position des littéraux x dans exp H (-1 si absent)

cherche l'exposant $\alpha_1, \dots, \alpha_s$ minimum : pointé par A1

```

BRA MK85

```

```

MK82: MOVE.L A1, A2
      MOVE.L A2, A3
      MOVE D6, D1
      SUBQ #1, D1

```

comparaison exposant A2 et A3

```

MK83: CMP D1, D0
      BEQ MK84
      CMPM (A0)+, (A3)+
      BEQ D1, MK83
      BEQ MK85

```

→ saute x

```

MOVE.L A2, A1
BRA MK85

```

→ A0 est le plus petit
↓ A2 est le plus petit

```

MK84: DBRA D1, MK83

```

MK84: ADDQ #2, A0
ADDQ #2, A3
↓ égalité (garder A0)

```

MK85: ADD D6, A2
      ADD D6, A2
      DBRA D5, MK82

```

Power
 $u(x) = \text{coef}(H, y_1^{\alpha_1}, y_2^{\alpha_2}, \dots)$

MOVE.L A6, -(SP) exposants α_i : A1

MOVE.L 28(SP), A2 H(x,y)

LEA 2(A2), A3 lettres en A3

SUBQ #1, D6 nb de litt - 1 (sauter D0^{le} D6^{ene})

← MOVEM.L D6/A1/A3, -(SP)

MK86 : CMP D6, D0
 BEQ MK87 → saute

MOVEM.L D0/D6/A1/A3, -(SP)

MOVE (A3), D0 littéral

MOVE (A1), D1 exposant

MOVE.L A2, A0

BSR XCOEF1 coef(, y ^{α})

MOVE.L ~~...~~, A0

BSR XLB76

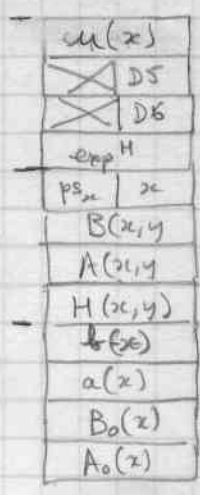
MOVEM.L (SP)+, D0/D6/A1/A3

MOVE.L ¹²*(SP), A2

MK87: ADDQ #2, A1

ADDQ #2, A3

DBRA D6, MK86



Poser $y_1^{\alpha_1} \dots y_s^{\alpha_s} = \mu$

MOVEM.L (SP)+, D6/A1/A3 ^{s-1 α_i y_i}

MOVE.L A6, -(SP) $\mu = 1$

CLR.L (A6)+

MOVE #14001, (A6)+

μ
$\mu(x)$

2146
MK86

MK870: CMP D6, D0

BEQ MK871 \rightarrow saute x

MOVEM.L D0/D6/A1/A3, -(SP)

MOVE (A3), D0 y_i

MOVE (A1), D2 α_i

BSR XPSMON $P_{A1} = y_i^{\alpha_i}$

MOVE.L 16(SP), A0 μ

BSR XMULP

BSR XLB76

MOVEM.L (SP)+, D0/D6/A1/A3

MK871: ADDQ #2, A1

ADDQ #2, A3

DBRA D6, MK870

```

MOVE.L 4(SP), A2, A0      ⊗ u(x)
MOVE.L 36(SP), A1        ⊗ a(x)

```

```
BSR XMULP
```

```

MOVE.L A2, A0
MOVE.L 44(SP), A1        ⊗ A0(x)

```

```
MOVE.L A0, -(SP)
```

```
BSR XJPMOD  $\hat{A} = \text{mod}(au, A_0)$ 
```

```
MOVE.L (SP), A0
```

```
BSR XLB76
```

```
MOVE.L 8(SP), A0      ⊗ u(x)
```

```
MOVE.L 36(SP), A1    ⊗ b(x)
```

```
BSR XMULP
```

```
MOVE.L A2, A0
```

```
MOVE.L 44(SP), A1    ⊗ B0(x)
```

```
MOVE.L A0, -(SP)
```

```
BSR XJPMOD  $\hat{B} = \text{mod}(bu, B_0)$ 
```

```
MOVE.L (SP), A0
```

```
BSR XLB76
```

```
MOVE.L 4(SP), A0       $\hat{A}$ 
```

```
MOVE.L 28(SP), A1    B(x)
```

```
BSR XMULP
```

```
MOVE.L A2, -(SP)
```

```
MOVE.L (SP), A1       $\hat{B}$ 
```

```
BSR XMULP  $\hat{A} \cdot \hat{B}$ 
```

```
MOVE.L (SP), A0       $\Delta$ 
```

```
MOVE.L (SP), A1
```

```
BSR XADDP  $\hat{A} \hat{B} + \hat{A} B(x)$ 
```

```
BSR XLB76
```

```
MOVE.L 4(SP), A0       $\hat{B}$ 
```

```
MOVE.L 36(SP), A1    A(x)
```

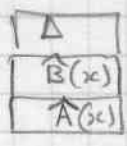
```
BSR XMULP  $\hat{B} A(x)$ 
```

```
MOVE.L (SP), A0       $\Delta$ 
```

```
MOVE.L A2, A1
```

```
BSR XADDP
```

```
BSR XLB76
```



```

⊗ { MOVE.L A2, A0
    MOVE.L 4(SP), A1
    BSR XMULP
}

```

```

⊗ { MOVE.L A2, A0
    MOVE.L 8(SP), A1
    BSR XMULP
    MOVEM.L (SP)+, A0/A1/A3
    MOVEM.L A0/A1, -(SP)
}

```

Calculer Δ

repete

10 vérif que $\deg(\Delta, y_i) \leq D_i$

remplace 109.1 109
 2
haut 110

~~MOV~~ MOVE.L (SP), A0 Δ

MOVE.L TBLDEG, A1 table des degrés

MOVE.L A6, -(SP)

Mo: MOVE (A1)+, D0 y_i

BMI MM12 \rightarrow fin

BSR XDEG $d5 = \deg(\Delta, y_i)$

OMP (A1)+, D5

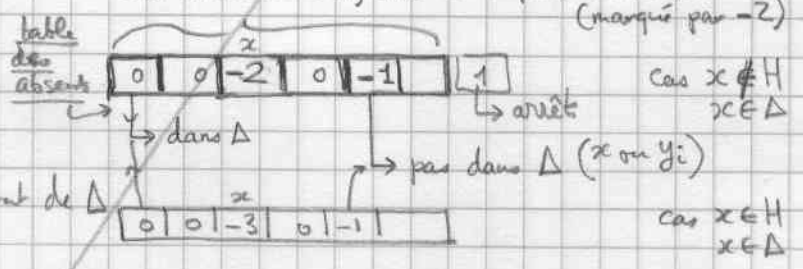
BLE Mo

MK97: etc

Exposants de Δ , sauf x ,
majorés par ceux de H ?

a) vérif que les littéraux de Δ
(sauf x) se trouvent dans H
et table des littéraux de H , en
sautant x , absents de Δ

les littéraux de H , avec x en plus si nécessaire
(marqué par -2)



```


    MOVE.L (SP), A0      Δ
    MOVE.L 40(SP), A1    H
    MOVE 30(SP), D1      x

    MOVE (A0)+, D5
    MOVE (A1)+, D6
    MOVE.L A6, -(SP)     absents

    BRA MK90


```

```

MK88: MOVE (A0)+, D0
      CMP  D0, D1
      BNE  MK89
      SUBQ #1, D6
      BMI  MKA10 ⊗
      CMP  (A1)+, D0
      BNE  MKA10
      MOVE #-3, (A6)+
      BRA  MK90

```

littéral suivant de Δ

cas x
→ $x \notin H$

→ $x \in \Delta$ et H

```

MKA10: SUBQ #2, A1
MKA11: ADDQ #1, D6
      MOVE #2, (A6)+
      BRA  MK90

```

$x \in \Delta$, mais pas en H

```

MK89: SUBQ #1, D6
      BMI  MK97
      MOVE #-1, (A6)+
      CMP  (A1)+, D0
      BNE  MK89
      CLR  -2(A6)

```

→ le littéral d_0 de Δ n'est pas dans H

```

MK90: DBRA DS, MK88
      MOVE #1, (A6)+

```

```

1: SUBQ #1, D6
   BMI  B3
   MOVE DS, (A6)+
   BRA  1
B3:

```

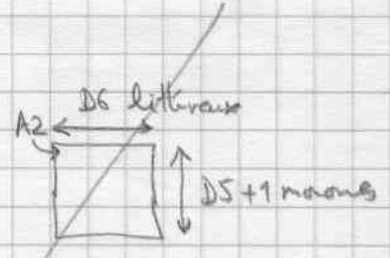
ici DS = -1

```

MOVE.L 4(SP), A0
BSR XJPANY

```

Δ
 table des exposants de Δ :
 boucle sur les DS+1 monomes



```

MK91: MOVEM.L 20(SP), D3/D4/A0

```

table des exposants de H

```

MOVE.L (SP), A1
MOVE.L A6, A3

```

table des absents
 met a A6 le ^{exposant du} monome de Δ , avec alignement

- sur H:
- si $y \notin \Delta$: $y \in H$ net exposant 0 (-1)
 - si $x \in \Delta$ $x \notin H$ saute x (-2)
 - si $y \in \Delta$ et $y \in H$ net exposat de Δ : 0
 - si $x \in \Delta$ $x \in H$ net exposant 0 (-3)

```

MK92: MOVE (A1)+, D0
      BNE MKA14
      MOVE (A2)+, (A3)+
      BRA MK92

```

```

MKA14: BPL MK93

```

→ fin

```

ADDQ #1, D0
BEQ MKA16
ADDQ #1, D0
BEQ MKA18

```

→ (-1) $y \in H$ $y \notin \Delta$ net zéro

```

MKA16: CLR (A3)+
      BRA MK92

```

→ (-2) $x \in \Delta$ $x \notin H$ saute x

↓ (-3) $x \in \Delta$ $x \in H$

```

MKA18: ADDQ #2, A2
      BRA MK92

```

```

MK93: MOVE D4, D2
      MOVE.L A0, A4
      MOVE.L A6, A3
      BRA MK95

```

cherche un majorant

MK94: CPM (A3)+, (A4)+

BCS MK96

→ échec pour ce monome de H.

MK95: DBRA D2, MK94

DBRA D5, MK91

X

BRA MM12

→ ok

MK96: ADD D1, A0

ADD D1, A0

) 0

DBRA D3, MK93

) 0

MK97: ADD #60, SP

MOVE.L (SP)+, A6 A0(x)

échec pas de majorant de H

changer les sous ensemble i1 -- im

lepile MK90-2

LEA -2(A6), A5

0

MOVE.L A5, A0

MK98: MOVE -(A0), D0

BMI MK75

→ augmenter m

MOVE.L A0, A1

MM10: SUBQ #1, D0

BEQ MK98

MOVE D0, (A1)+

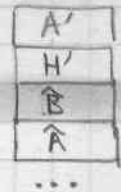
CMP.L A5, A1

BCC MK77

→ nouveau sous ensemble

BRA MM10

calculer H-H - Δ



```

MM12: MOVE.L (SP)+, A0/A1 Δ
      MOVE.L ...
      MOVE.L ..., A0 H
      BSR XSUBP H' = H - Δ
      MOVE.L A2, -(SP)

```

calculer A' = A + A^

repete →

```

      MOVE.L 8(SP), A0 A^
      MOVE.L 36(SP), A1 A
      BSR XADDP A' = A + A^
      MOVE.L A2, -(SP)
      MOVE.L 8(SP), A0 B^
      MOVE.L 36(SP), A1 B
      BSR XADDP B' = B + B^
      MOVE.L A6, A5
      MOVE.L ...
      MOVE.L (SP)+, A6 fin H'
      MOVE.L (SP)+, A2 debut H'
      ADD #36, SP
      MOVE.L (SP), A0 ← MOVE.L A0, A3 H
      BSR XLB76
      MOVE.L A6, -(SP)
      MOVE.L A4, A6
      BSR XLB76
      MOVE.L A6, -(SP)
      MOVE.L A5, A6
      BSR XLB76

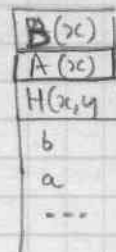
```

```

TST.L (A3)+
BNE MK80
CMP # $4000, (A3)
BNE MK80

```

H=0 ?



On a trouvé
 $A(x)$ facteur de $h(x,y)$

```

MOVE.L (SP)+, A6 B(x)
MOVE.L (SP)+, A2 A(x)
ADD #24, SP
MOVEM (SP)+, D5/D6

```

SUB D5, D6 $D6 = m' = t - m$ (nb de facteurs de B)

~~SUBQ #1, D5~~ ⊗

ADD D5, D5 $D5 = 2^{(m-1)} 2m$

MOVEQ #0, D4
 CMP D5, D6

$m' \leftarrow 2(m-1)$ B est irréductible
 sinon

$D4 = 0$
 $D4 = 1$ } valeur de $D0^S$

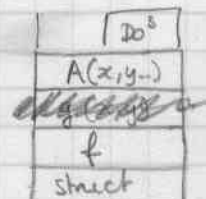
BLF MM14 ⊗

MOVEQ #1, D4

MM14: ADD #1, SP ⊗

MOVE.L (SP), A0 $g(x,y)$

BSS XLB76

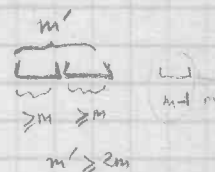


upils
 MK61+-

```

MOVE.L (SP), A0 A
MOVE.L (SP), A1 structure
MOVE (A1)+, D6 A
SUBQ #1, D6
MOVE (A1)+, D2 x
MOVE D4, -(SP)  $D0^S$ 

```



```

MM16: MOVE (A1)+, D0      yi
        MOVE (A1)+, D3      ai
        NEG D3
        EXT.L D3          -ai
        MOVE (A1)+, D1      bi
        NEG D1
        EXT.L D1          -bi

```

```

BSR XJPSAB
DBRA D6, MM16
BSR XNORPE

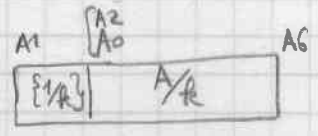
```

```

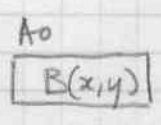
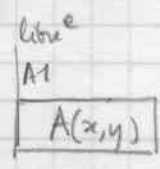
MOVE.L 10(SP), A0  ⊗
MOVE.L A0, A1
BSR XLB76
MOVE.L (SP), A0  †
BSR XDCTE XCDIV
MOVE.L A2, A0
MOVE (SP)+, D0      { 0  A*Bired
                    { 1  A*Bred
MOVE.L (SP)+, A2    ⊗
ADDQ #8, SP
RTS

```

$$A = \text{subs}(A, y_i = y_i - a_i x - b_i)$$
 Comment: D2/D6/A0/A1



$A = \text{red}(A)$



{ 0 A*B^{ired}
 { 1 A*B^{red}