

② Programme opérateur sur variables

entrée:  $A_0 : \text{var}_{A_0} = \Phi$  (type factorisé ou polynôme)

$A_1, A_2$  : paramètres

$A_3$  : sous programme de traitement des polynômes

$PG_{A_3}(\mathcal{P}_{A_0}, A_1, A_2)$  pose  $\varphi(\mathcal{P}_{A_0})$  forme factorisée

et renvoi  $DS \neq 0$  si non modifié  
 et renvoi  $DS = 0$  si modifié

sortie: si  $\text{var}_{A_0} = \lambda f_1^{\alpha_1} f_2^{\alpha_2} \dots f_n^{\alpha_n} = \Phi$

Conserve  $A_0/A_1/A_3$

$\text{var}_{A_2} =$  pose en libre  $\lambda \varphi(f_1)^{\alpha_1} \varphi(f_2)^{\alpha_2} \dots \varphi(f_n)^{\alpha_n} = \varphi(\Phi)$

$A_4^s = A_2^e$

repete XCNM1

```
XGEN: MOVEM.L A0/A1/A2/A3/A4, -(SP)
      CLR.L  -(SP)
      MOVE  (A0)+, D1
```

$\sum DS = 0$

```
BNE KK65
```

Cas factor  $\Phi$  forme polynome

```
JSR (A3) ← { EXT.L DS
              MOVE.L DS, (SP) } ⊗
```

```
KK64: MOVEM.L (SP)+, DS/A0/A1/A2/A3/A4
```

{ conserve  $A_0, A_1, A_3$  dans ce cas  
 $A_4 =$

```
EXG A2, A4
```

```
RTS
```

```
KK65: MOVE #1, (A6)+ ← SUBQ #1, D1 ⊗
```

```
BSR XPOSE
```

$A_4$  pointe  $f_2$

```
BRN KK68
```

Boucle sur les facteurs  $k=2 \dots n$

```
KK66: MOVE.L (A4)+, D0
```

```
MOVE.L A4, A0
```

```
ADD.L D0, A4
```

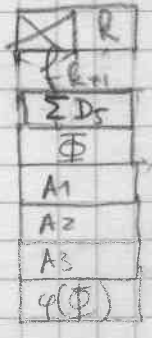
```
MOVEM.L D1/A4, -(SP)
```

```
MOVEM.L 16(SP), A1/A2/A3 ⊗
```

```
JSR (A3)
```

```
EXT.L DS
```

```
ADD.L DS, 8(SP)
```



```

MOVE.L A2, A0
MOVE.L 4(SP), A1  $f_{k+1}$ 
MOVE -(A1), D1  $\alpha_k$ 
BSR XEXPF  $\varphi(f_k)$   $\alpha_k$ 
MOVE.L A2, A1
MOVE.L 28(SP), A0  $\varphi(\Phi)$ 
BSR XMULF nouveau  $\varphi(\Phi)$ 
MOVEM.L (SP)+, D1/A4
KK68: DBRA D1, KK66
BRA KK64

```