

②

$$U = \mathcal{P}_{A_0} = A_m x^m + \dots$$

$$V = \mathcal{P}_{A_1} = B_n x^n + \dots$$

$x = D_0$

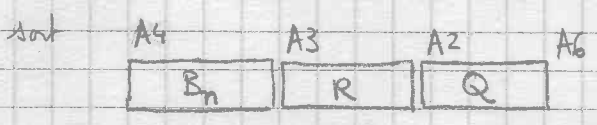
Pseudo division

conserve A0/A1/D0

134
KI72

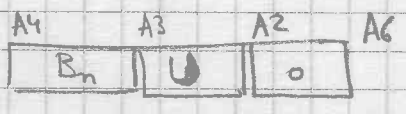
(note: essai sans calcul de Q gagné seulement)
1% de calcul pged

si $m \geq n$ $(B_n)^{m-n+1} U = QV + R$ $\deg(R) < \deg(V)$



$$D1^s = n$$
$$D2^s = m - n + 1 = \alpha$$

si $m < n$ $U = 0.V + U$



$$D1^s = n$$
$$D2^s = 0$$

repet: XDIVP

```
XPSDIV: MOVEM.L A0/A1, -(SP)
```

```
TST.L (A1)
```

```
BNE KI72
```

```
CMP #4000, 4(A1)
```

```
BEQ ERRODV division / 0
```

```
KI72: EXG A0, A1
```

```
BSR XDEG
```

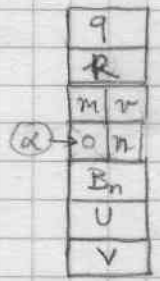
```
MOVE D5, D1
```

```
BSR XCOEFP
```

```
EXG A0, A1
```

```
EXT.L D1  
MOVEM.L D0/D1/A2, -(SP)
```

$D5 = n$



```
KI74: BSR XPSAP
```

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

```
BSR XPSPO
```

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

recopie U

```
BSR XDEG  
MOVE D5, (SP)  $\alpha$   
SUB 6(SP), D5  
BMI.BS KI74  $\alpha$  not  $\alpha = \max(0, m-n+1)$   
ADDQ #1, D5  
MOVE D5, 4(SP)
```

q=0

KI76: MOVEM 8(SP), D0/D1/D2/D3

CMP D3, D0 ← $\begin{matrix} R & r & x & n \\ \text{CMP } \#-1, D0 \\ \text{BEQ } KI77 \end{matrix}$ ⊗

x BCC KI78 ⊗
fin

KI77: MOVEM.L (SP)+, A2/A3
 $\begin{matrix} Q \\ R \end{matrix}$

MOVEM.L (SP)+, D0/D1/A4
 $\begin{matrix} r \\ n \end{matrix}$

MOVEM.L (SP)+, A0/A1
RTS

KI78: EXG D0, D1
 $\begin{matrix} r \\ k \end{matrix}$

MOVE.L 4(SP), A0 R

BSR XCOEFP $P_{A2} = \text{coef}(r, k)$

$\boxed{\text{coef}(r, k)}$

SUB 14(SP), D1 $D1 = k - n$

MOVE D1, D2

BSR XPSMON $P_{A1} = x^{k-n}$

MOVE.L A2, A0

$\boxed{c \quad | \quad cx^{k-n}}$

BSR XMULP

MOVE.L A2, A1 cx^{k-n}

MOVE.L 24(SP), A0 V

BSR XMULP $P_{A2} = cx^{k-n} V$

MOVE.L (SP), A0

MOVEM.L A1/A2/A6, -(SP) q

$\begin{matrix} cx^{k-n} \\ cx^{k-n} V \\ B_n q \end{matrix}$

MOVE.L 28(SP), A1 B_n ⊗

BSR XMULP $B_n q$

MOVE.L 16(SP), A0 R

BSR XMULP $R B_n$

(2) MOVE.L A2, A0 R_{A2}
 MOVE.L 4(SP), A1 $c x^{k-n} V$
 BSR XSUBP $P_{A2} = R' = \beta_{n+1} q - c x^{k-n} V$
 MOVEM.L (SP)+, A0, $c x^{k-n}$
 MOVEM.L (SP)+, D0/A1 $\times \beta_{n+1} q$
 MOVE.L A2, -(SP)
 BSR XADDP $P_{A2} q' = q' = \beta_{n+1} q + c x^{k-n}$
 MOVEM.L (SP)+, D0/D1/A0 $R' \times R$
 MOVE.L A2, D1
 SUB.L D0, D1
 ADD.L A0, D1
 SUBQ #1, (SP) $k = k - 1$
 MOVEM.L D1/A0, -(SP)
 MOVE.L D0, A2
 BSR XLB76
 BRA KI76

