(2) Divisia exacte $P = QR$

entrée $\mathcal{P}_{A_0} = P = c_m x^m + \dots$

$\mathcal{P}_{A_1} = Q = c_n x^n + \dots$

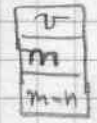
~~sortie erreur~~ si $P \neq QR$ MI vrai conserve A0/A1

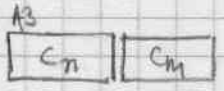
sortie ok $\mathcal{P}_{A_2} = R$ en libre MQ vrai

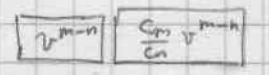
```
XCTDIVI: TST.L   (A1)+
         BNE     KI67
cas PA1 = cte
         BSR     XDCTE          PA2 {A1}
         SUBQ    #4,A1  ← CLR D1 ⊗
         RTS

KI67 : SUBQ  #4,A1

         MOVEM.L  A0/A1,-(SP)
         BSR      XPSP0          R=0
         MOVE.L   A2,-(SP)
         BSR      XPSAP          a=P
         MOVE.L   A2,-(SP)

KI68 : MOVE.L  (SP),A0          PA0 = 0 ?
       TST.L   (A0)
       BNE     KI69             → non
       CMP     #$4000,4(A0)
       BNE     KI69             → non
                                ↓ oui : fin
       MOVE.L  A0,A6
       MOVEM.L (SP)+,D0/D1/A0/A1
       MOVE.L  D1,A2  ← CLR D1 ⊗
       RTS
```

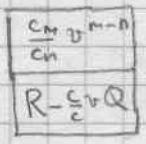
```
KI69: MOVE.L  12(SP),A1      P_A1 = Q
      MOVE.L  (A1),D0        v
      BSR     XDEG           } D6 = m
      MOVE    D5,D6          }
      EXG     A0,A1
      BSR     XDEG           D5 = n
      MOVE    D6,D1          D1 = m
      SUB     D5,D6          D6 = m-n
      BMI     ERRLA KI70     ⊗
      MOVEM   D0/D1/D6,-(SP)
      MOVE    D5,D1
      BSR     XCOEFP
      MOVE.L  A2,A3          P_A3 = c_n
      EXG     A0,A1
      MOVEM   (SP),D0/D1
      BSR     XCOEFP         c_m
      MOVE.L  A2,A0
      MOVE.L  A3,A1          c_n
      BSR     XCTDIV1        c_m/c_n   ⊗
      MOVE.L  A2,A0
      MOVEM   (SP)+,D0/D1/D2
      BSR     XFSMON         met P_A1 = v^(m-n)
      BSR     XMULP
      MOVE.L  A2,A1          P_A1 = (c_m/c_n) v^(m-n)
      MOVE.L  12(SP),A0      P_A0 = Q
      BSR     XMULP          (c_m/c_n) v^(m-n) Q
      MOVE.L  A1/A6,-(SP)
      MOVE
```

v ← BMI KI70 ⊗ (m-n)



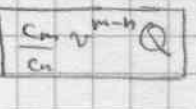




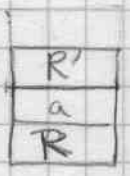


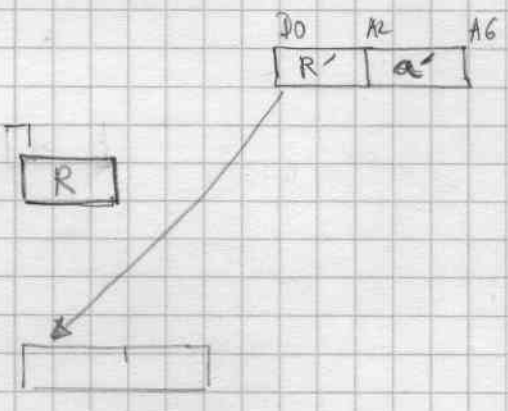
(2)

```
MOVE.L  12(SP),A0      P_A0 = Q
BSR     XMULP          P_A2 = (Cm/Cn) v^(m-n) Q
MOVE.L  4(SP),A0       P_A0 = R
MOVE.L  A2,-(SP)
BSR     XADDP          P_A2 = R + (Cm/Cn) v^(m-n) = R'
MOVE.L  (SP)+,A1  ~> (Cm/Cn) v^(m-n) Q
MOVE.L  (SP),A0   ~> a
```




```
MOVE.L  A2,-(SP)
BSR     XSUBP          P_A2 = a - (Cm/Cn) v^(m-n) Q = a'
MOVEM.L (SP)+ D0/D1/A0
                       R'  x  R
MOVE.L  A2,D1
SUB.L   D0,D1
ADD.L   A0,D1
MOVEM.L D1/A0,-(SP)
MOVE.L  D0,A2
BSR     XLB76
BRA     KI68
```






```
KI70: MOVEM.L (SP)+,A0/A6
      MOVEM.L (SP)+,A0/A1
      RTS
```