(1) Divisa entière en flottant (positif)

entrée $a = \langle A0 \rangle \geq 0$

$b = \langle A1 \rangle > 0$

$a = \frac{A}{2^\alpha}$ $b = \frac{B}{2^\beta}$ $m = \max(\alpha, \beta)$

$a = \frac{A'}{2^m}$ $b = \frac{B'}{2^m}$

$A' = B'Q + R$ $a = bQ + \frac{R}{2^m}$

sortie

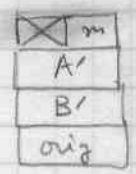
$m = \alpha$ $B' = 2^{\alpha-\beta} B$

$m = \beta$ $A' = 2^{\beta-\alpha} A$

```
XFLDIV1 :MOVE  (A0)+,D0      α
         MOVE  (A1)+,D2      β
         MOVE  I
         MOVE.L  A6,-(SP)
         CMP   D0,D2
         BLT   ML62

         MOVE.L  A1,-(SP)
         MOVEM.L D2/A6,-(SP)
         MOVE
         SUB   D0,D2
         BVS   errrg
         BSR   XROT
         BRA   ML63

ML62:    MOVEM.L D0/A0/A6,-(SP)
         EXG   D0,D2
         MOVE.L  A1,A0
ML63:    SUB   D0,D2
         BVS   ERRRG
         BSR   XROT

         MOVEM.L (SP),D0/A0/A1
         BSR   XDIV1
         MOVE.L  A2,-(SP)
         MOVE.L  A3,A0
         BSR   XINTE1
         M
         ADD   D0,(A2)
         BVS   ERRRG
         MOVE.L  A6,A5
         MOVE.L  A2,A6
```

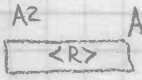
→ $m = \alpha$

↓ $m = \beta$



dépasse

mot soit [A2] = $\begin{cases} A' = 2^{\beta-\alpha} A \\ B' = 2^{\alpha-\beta} B \end{cases}$



$\frac{R}{2^m}$ en flottant

(1)

```
MOVE.L  A6,A5
MOVE.L  A2,A6
MOVE.L  (SP)+,A2
MOVE.L  (SP)+,D0
ADD     D0,(A6)
BVS     ERRRG
ADDQ    #8,SP
MOVE.L  (SP)+,A0
MOVE.L  A0,A3
BSR     XLB76
MOVE.L  A0,A1
MOVE.L  A5,A6
BSR     XLB76
MOVE.L  A1,A2
RTS
```

$\otimes \frac{\langle R \rangle}{2^m}$