⑤ root (expr, k) k index ≥ 1

si expr = x^k sort x

sinon sort 0

```
MB710 : RTS
YRO:  BSR   WINDEX
      CMP   #1,D3
      BEQ   MB710          → rts
      BLT   ERRRT
YROOT1 :MOVEM.L D3/A5,-(SP)   ⊗
      BSR   LB95             tapis le terminal

      MOVEQ #0,D3
      BSR   YFRF1            factorise facteurs multiples
      ADDQ  #4,A0
      MOVE.L  (SP)+,D3

      MOVEM.L  D3/A0/A6,-(SP)
      MOVE  #1,(A6)+  ↖ ADDQ #2,A0
      BSR   XR02
      TST   D4
      BEQ   MB72
      fin non racine
MB71: ADDQ  #4,SP
      MOVE.L  (SP),A6
      MOVEQ #0,D0
      BSR   WSD3L
      MOVE.L  (SP)+,A0/A3/A5
                  bid

      BRA   MG620
MB72: MOVEM.L  4(SP),A0/A1
      CMP   #1,(A0)+
      BNE   MB74                cas ch
      MOVEM.L  (SP)+,D3/A0/A2
MB73: MOVE.L  A0,A1
      BSR   XLB76
      MOVE.L  A1,A0
      MOVE.L  (SP)+,A5
      BRA   MG620
```

(5)

```
MB74:ADDQ  #2,A1
     EXG   A0,A1
     MOVE.L  A0,-(SP)
     BSR   XDIVS2
     MOVE.L (SP)+,A0
     BSR   XLB76
     MOVEM.L  (SP),D3/A0
     MOVE  (A0)+,D1
     SUBQ  #2,D1
     BSR   SLNGO
     ADD   D0,A0
MB76:ADD.L  (A0)+,A0
     MOVE  -(A0),D0
     EXT.L D0
     DIVS  D3,D0
     MOVE  D0,(A0)+
     SWAP  D0
     TST   D0
X    BNE   MB71          → non racine
     DBRA  D1,MB76
     MOVEM.L  (SP)+,D3/A0/A1
     BSR   XCONCP
     BRA   MB73
```

$A0 = \sqrt[k]{\alpha}$

$A1 = \alpha$

boucle sur les facteurs