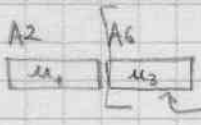
(10) Entrée |[A0]| · |[A1]| $u \neq 0$ $v \neq 0$
u v



← contient le pgcd de u et v

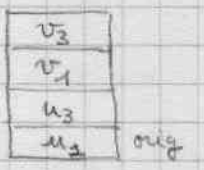
Pose en libre [A2] tel que $|u_1| < v$
u_1

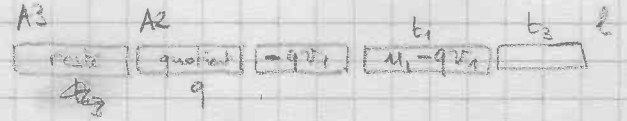
$u u_1 \equiv \text{pgcd}(u,v) \mod v$

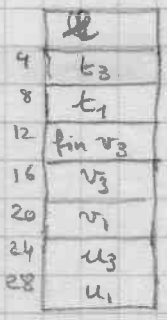
(Algorithme d'Euclide étendu Knuth p325)

```
XMINV:MOVE.L  A6,-(SP)      u1=1
      MOVE    #$4001,(A6)+
      MOVE.L  A6,-(SP)      u3=u
      BSR     XPOSE
      MOVE.L  A6,-(SP)      v1=0
      MOVE    #$4000,(A6)+
      MOVE.L  A6,-(SP)      v3=v
      MOVE.L  A1,A0
      BSR     XPOSE
MI10  :MOVE.L (SP),A1       v3
      CMP     #$4000,(A1)
      BNE     MI12
fin   ADDQ    #8,SP
      MOVE.L  (SP)+,A0
      MOVE.L  (SP)+,A2      u1
      RTS

MI12  : MOVE.L  8(SP),A0    u3
      BSR     XDIV1
      MOVE.L  A3,-(SP)
      MOVE.L  A2,A0         q
      MOVE.L  8(SP),A1      v1
      BSR     XMULS1        q v1
      MOVE.L  A2,A1   <-CHGS
      MOVE.L  16(SP),A0     u1
      BSR     XADDS1        t1 = u1 - q v1
      MOVE.L  (SP),A0       t3
      MOVE.L  A2,-(SP)
      BSR     XPOSE
      MOVEM.L A2/A6,-(SP)
```

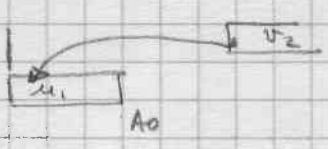






v_3 v_1 u_3 u_1

```
MOVEM.L  16(SP), A0/A2/A3/A6
EXG      A0,A6
BSR      XLB76          copie nouveau u1
MOVE.L   A6,24(SP)      nouveau u3
MOVE.L   12(SP),A6      fin de v3
BSR      XLB76          copie nouveau u3
MOVE.L   A6,20(SP)      nouveau v1
MOVEM.L  (SP)+, A1/A2/A6
EXG      A2,A6
BSR      XLB76          copie nouveau v1
ADDQ #8,SP
MOVE.L   A6,-(SP)       nouveau v3
MOVE.L   A1,A6
BSR      XLB76          copie nouveau v3
BRA      MI10
```



MOVE.L (SP)+, A6 t_3
MOVE.L (SP)+, A1 t_2
MOVE.L (SP)+, A2 t_1