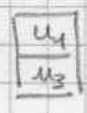


```
GAP52: BSR POPN  
      BSR POPRR  
      ADDQ #2, SP  
      RTS
```



Entrée

$$p_1 = u$$

$$p_2 = v$$

cxinv(u, v)

Sortie $p_0 = u_1 = \text{cxinv}(u, v)$
 $p_1 = u_2 = \text{exgcd}(u, v)$

$$u u_1 + v u_2 = u_3$$

non déterminé

knuth p325

XEUCL: MOVE TVARN, -(SP)

XEUCL: BSR PUSHND $u_1 = 1$

BSR PUSHNZ $v_1 = 0$

GAP46: MOVE (SP), D0 $v_3 = 0 ?$

BSR XHZERO (1) 306

BEQ GAP52 \rightarrow fin

MOVE (SP), D2
 SUBQ #1, D2
 BSR LB321 u_3

MOVE (SP), D2
 BSR LB321 v_3

BSR YCXDIV1 $q = \lfloor u_3 / v_3 \rfloor$

MOVE (SP), D2
 ADDQ #2, D2

BSR GAP48 pose t_1

MOVE (SP), D2

BSR GAP48 pose t_3

MOVE (SP), D2
 BSR GAP50 $u_3 \leftarrow v_3$

MOVE (SP), D2
 ADDQ #2, D2
 BSR GAP50 $u_1 \leftarrow v_1$

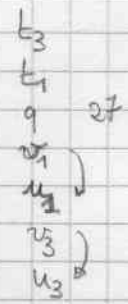
MOVE (SP), D0
 BSR WASGN2 $v_3 \leftarrow t_3$

MOVE (SP), D0
 ADDQ #2, D0
 BSR WASGN2 $v_1 \leftarrow t_1$

BSR POPN
 BRA GAP46

v_1	26
u_1	25
v_3	24
u_3	23

\rightarrow n° sur la pile (SP)



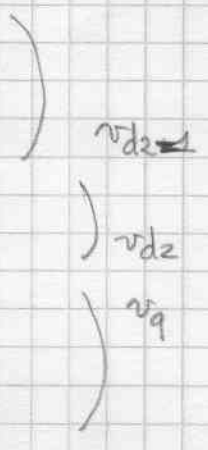
X

entrée d2 pose $v_{d2-1} - v_{d2} * v_9$

```

GAP48: MOVE D2, -(SP)
        SUBQ #1, D2
        BSR LB321
        MOVE (SP)+, D2
        BSR LB321
        MOVE 4(SP), D2
        ADDQ #3, D2
        BSR LB321
        BSR XIMUL
        BSR XISUB
        BRA WICOND

```



entrée d2 assigne $v_{d2-1} = v_{d2}$

```

GAP50: MOVE D2, -(SP)
        BSR LB321
        MOVE (SP)+, D0
        SUBQ #1, D0
        BRA WASGN2

```