

Entrée $u_1 u_2 \dots u_k$ $k \geq 2$ $u_i \wedge u_j = 1$ polynômes en x

Sort $v_1 v_2 \dots v_k$

tels que $\sum \frac{v_i}{u_i} = \frac{1}{u_1 \dots u_k}$, $\deg(v_i) < \deg(u_i)$

XMF BEZ

A1 $n=1$
 $v_1=1$
 $P=1$

A2 ici $\frac{v_1}{u_1} + \frac{v_2}{u_2} + \dots + \frac{v_n}{u_n} = \frac{1}{u_1 u_2 \dots u_n}$
 $P = \frac{1}{u_1 \dots u_{n-1}}$

si $n=k$ fin
sinon: $P = P u_r$

A3

~~$\frac{v_i}{u_i} = \text{ndmod}(a v_i, u_i, P)$~~
Calculer a et b : $a u_{n+1} + b P \equiv 1 \pmod{p}$

Pour $i=1 \dots n$

$b = \text{ndmod}(1 - a u_{n+1}, P, p)$

$v_i = \text{ndmod}(a v_i, u_i, P)$

$v_{n+1} = b$

aller en A2 $\leftarrow n=n+1$