Residuo chino:

main:

```
#include <iostream>
#include <mat.h>

using namespace std;

int main()
{
    mat fun;
    cout <<
fun.resto_chino(conv<ZZ>("2"),conv<ZZ>("3"),conv<ZZ>("4"),conv<ZZ>(
"5"));
    return 0;
}
```

mat.h:

```
#ifndef MAT_H
#define MAT_H
#include <NTL/ZZ.h>

using namespace NTL;
using namespace std;

class mat
{
    public:

        mat();
        ZZ resto_chino(ZZ,ZZ,ZZ,ZZ);

};

#endif // MAT_H
```

mat.cpp:

```
#include "mat.h"

using namespace std;

mat::mat()
{}
ZZ mat::resto_chino(ZZ a1,ZZ p1, ZZ a2, ZZ p2){
    a1=mod(a1,p1);
    a2=mod(a2,p2);
    ZZ P = p1*p2;
    ZZ q1 = inv_mult(mod(p2,P),p1);
    ZZ q2 = inv_mult(mod(p1,P),p2);
    return mod(mod(a1*p2*q1,P)+mod(a2*p1*q2,P),P);
}
```