Name: VEN THON

ID: e20191250

Group: I3-GIC-C

1). Congruence is :

* Let a and b be integers and m be a positive integer.

We say that a is ***congruence to b modulo m*** if m divides a-b.

* We use the notation ab(mod m) to indicate that a in congruence to b modulo m.
* In others words: ab(mod m) if and only if a mod m=b mod m.

2). Is it true that 108204(mod 3)? Why?

Since 108 mod 3 = 0

204 mod 3 =0

=>108 mod 3 = 204 mod 3 = 0

So 108 is congruence to 204 modulo 3.

3). Is it true that 85 ? Why?

Since 85 mod 15 = 10

65 mod 15 = 5

=>85 mod 15 65 mod 15 = 5

So that 85 is not congruence to 65 modulo 15.

4) A={10,11,….,50} for which integer A that A ?

But 7 mod 4 = 3

So the numbers congruence to 7 mod 4 are{11,15,19,23,27,31,35,39,43,47}

5) B={31,32,….,91} for which integer B that B ?

But 10 mod 6 = 4

So the numbers congruence to 10 mod 6 are{34,40,46,52,58,64,70,76,82,88}

6). What is answer of (5BA7CD)16 to (?)10?

(5BA7CD)16=[5x16^5 + Bx16^4+Ax16^3+7x16^2+Cx16+Dx16^0]

=5x1048576+11x65536+10x4096+7x256+192+13

= 600673310

7). What is anser of (2594)10 to(?)6?

2594=6x432 + 2

432=6x72 + 0

72=6x12 + 0

12=6x2 + 0

2=6x0 + 2

So that (2594)10=(20002)6