Solve the egg problem used to illustrate the Chinese Remainder Theorem if the remainders on division by 2,3,4,5,6 and 7 are all 1 by

(i) the given procedure (ii) the "easier" way

1. the given procedure

X=1(Mod2)
X=1(Mod3)
X=1(Mod4)

X=1(Mod5)
X=1(Mod6)
X=1(Mod7)

If and and then . We will use this result.

The first congruence can be ignored since implies .

The fifth congruence, is equivalent to . But these are already true. Thus, this congruence can be ignored also.

We are left with,





This is equivalent to,


I have found that the congruent to 1 modulo 420 (30\*40\*50\*7=420)

I am not sure if this is right..

For the second part what i have to do?

I said that when the eggs were taken out of 2 the remainder was 1 so 2k+1.. and i continues in thas way.. but i am not sure.. please can you help ....