Subject: Chinese Reminder Theorem Date: 0) system: N = 1 (mod 3) N = 2 (mod 5) M = 3 (mod 7) Total modulus N = 3.5.7 = 105 Force och congruenace n = ai (mod ni) compute Ni = N/ni and inverse yi or Ni mac > ni = 3, a = 1: N1 = 105/3 = 35 35 = 2 (mod 3). solve, 24, = 1 (mod 3) > 41 = 2 contrabution: aNiy, = 1.35.2=70 \$ 112=5, Q2=2! N2 = 105/5 =21 => 21 = 1 (mad 5) so, y2 = 1 contribution: 2.21.1 = 42 :CEF

Subject : \_\_\_\_\_ Date : \_\_\_

Date:

⇒ n3 = 7, a3 = 3! N3 = 105/7 = 15

= 15 = 1 (mod 7), so, y3 = 1

contribution = 3.15.1 = 45

sum = 70+42+ 45 =+47 157

Reduce modulo 105: 157 = 157-105 = 52

Cash situal Dortadistan

103 (8 ham) 1 - 10 6

n 252 (mod 105)

since, 526 mod 3 = 1,

52 mod 5 = 2

52 mod 7 = 3

Subject: Date: 6 Egn: N = 5 (mod 11), N = 14 (mod 29), M= 15 (mod 31) N = 11.29.31 = 9889n1 = 11, 01 = 5: N1 = 9889/11 = 899 \$ 899 = 8 (mod 11). solve, 8 Y, = 1 (mod U) > Y1=7 (since 8.7 = 56 = 1) contribution: 5.809.7=5.6293 = 31465 > n2 = 29, a2 = 14: N2 = 0989/29 = 341 => 341 = 22 (mod 29), solve 2242 = 1 (mod 29) => 42 = 4 (since 22.4 = 88 = 1) contribution; 14.341.4 =14.1364 =19096 7 N3 = 31, Q3 = 15: N3 = 0880/31 = 319 ≥ 319 = 9 (mod 31). Salve 943 = 1 (mod 3) > 43 =7 (sinc 9.7 = 63 =1) :CEFALO

7

333

ubject :	Date:
contribution; 15.319	7 = 15.2233 = 33495
sum; 31465 + 1909	06+33495=84056
Reduce modulo	9849'

(ec bam)

4944 mad 11 = 5

4944 mod 28 = 14

49 44 mod 31 = 15

हलकार महदा माद भेगार भा

Subject : Date :
<u>c</u> )
System: N=5 (mod 6), n=4 (mod 11)
n ≥ 3 (mod 17)
-1(=3(110017)
N - / 11 177 AAAAA
$N = 6 \cdot 11 \cdot 17 = 1122$
484 = 3386 - 1911
n1 = 6, a = 5: N1 = W12/6 = 187
187 = 1 (mod6) > 4,=1
contribution : 5.187.1 = 935
- COMMUNICITY D. 107. 12 935
$N_2 = 11$ , $\alpha_2 = 4$ , $N_2 = 1122/11=102$
102 = 3 (mod 4), solve 342 = 1 (mod 11) = 4
contribution: 4.102.4 > 4.408 = 1632
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
=> N3 = 17, Q3 = 3: N3 = 1122/17 = 66
66 = 15 (mod 17) solve 1643 = 1 (mod 17)
Note 15 = -2,500 -243 = 1
> 010 = 11 > V - 0
→ 243 = 16 → 43 = 8
contribution: 3.66.8 2 15 84
sum: 935+ 1632 + 1584 = 4151

Subject :	Date:
Peduce modulo -	3 +3C 3(03)-34-
$\frac{-427}{1122: 1122:3} = 33.$	66,
4151-3366 = 78	5 3 2 40 0 7 3 5 P
4151-3366 - 7	
n = 785 (mad	1122)
785 mod 6 25	12: 11, ag = a,
785 mod 11 = 4	to 2 2 ° 8 (most 10), c
7 85 mod 17 = 3	इवर म १ कार्याक्षक्रांक्षक
: Na 1122 /17 - CGF	8 - 8 D - A) = 8 (r (c
(4) PAU 1 = PAU 34105	(2) Paris 99
7 ; 8kč. 00c	No.46 1.5 E -24-5
	\$ 21 5 8 7 2 6 2035 18 1 18 10 10 10 10 10 10 10 10 10 10 10 10 10
	August of the contraction