Either Par a must be one of those Ir us look the next highest prime, being 59, Ve vould see the "Ind humber louldn't be above 48: 11 3 2351 / 59 3 48.8 So, it both Pand a are prime humbers and one of the princes 11 over 54 (aka 59, 61, 67, ...), the other must be under 48.8 and thus Winder 48 Jaka 47, 43, 411). Therefore, al least one of Pand Qis under 54. Since one of the values must be under 48.8, ve can take each some under it and divide by the product of Pia as 1881 so: ~ 18.8 - 48.8 ~ 2.281/47 5 61,29 × not a prima 2.881/43 : 67 1 a princ 43 and 61 are boin primes and their product is 2,881, therefore P:43 and Q:67. (?-1) (43-1) 42 42 66 5 2 772 (Q-1) (67-1) 66 (P-1)(Q-1) We already know E. 1,109 in always a prime number. Su G(D'[E, [?-1](Q-1)): G(D[1,109, 2, 772):1 Therefore, E and (P-1110-1) are relatively prime because the greatest integer that divide them buth

9. D is a matular loverse of E so: D i E'(mod (42.68)) Di E'(mod (42.68)) Di E'(mod 2,712) D' 1009' (mod 2,712) D' 0000159 5 We can decode using M = C (mod N). Breaking down into each block, we know N is 2,881, C is each individual block (which must be less than N) and D is 0000159, So, doing such block individually: (which is grobably victory) 1. 1567-0000159 (mod 2,881) = individual there put a such block individual there put a such b		
Diff'(mod (P-1)(Q-1)) Diff'(mod (42.68)) Diff'(mod 2,712) Diff'(mod 2,712) Diff'(mod 2,712) Diff'(mod 2,712) Diff'(mod 2,712) Diff'(mod 2,712) S. We can decode using M=Co(mod N). Breaking down into each block, we know N is 2,881, (is each individual block (which must be less than N) and D is .0000159. So doing such block individually: (which is probably wrong) 1. 1567.0000159 (mod 2,881)= individual then put 3 1023.000159 (mod 2,881)= individual then put 4,398.000159 (mod 2,881)= 5. 581.0000159 (mod 2,881)= 6. 1,427.0000159 (mod 2,881)= 7. 1,623.0000159 (mod 2,881)= 8. 2,679.0000159 (mod 2,881)= 9. 895.0000159 (mod 2,881)= 9. 895.0000159 (mod 2,881)= 10. 948.0000159 (mod 2,881)=	4.	Disamodular inverse of Eso:
D: [109" (mod 2,712) D: 1109" (mod 2,712) D: 0000159 5. We can decode using M = C (mod N). Breaking down Inio each block, we know N is 2,881, C is back individual block (which must be less than N) and D is .0000159. So, doing such block individually: 1. 1567 .0000159 (mod 2,881) = All these become 1, 214 .0000159 (mod 2,881) = individual then put 1, 398 .0000159 (mod 2,881) = tagether and energy 1, 398 .0000159 (mod 2,881) = 5. 581 .0000159 (mod 2,881) = 6. 1427 .0000159 (mod 2,881) = 7. 1623 .0000159 (mod 2,881) = 8. 2,579 .0000159 (mod 2,881) = 9, 895 .0000159 (mod 2,881) = 10, 948 .0000159 (mod 2,881) =		
D: 1109" (mod 2,772) D: ,0000159 5. We can decode using M = C (mod N). Breaking down into each block we know N is 2,881, C is Each individual block (which must be less than N) and D is ,0000159. So, doing each block individually: (which is probably wrong) 1. 1567 (mod 2,881) = All these become 2. 214 ,0000159 (mod 2,881) = individual then 2nd 3. 1023 .0000159 (mod 2,881) = tagether and entrypt 4. 398 .0000159 (mod 2,881) = 5. 581 (mod 2,881) = 6. 1,427 .0000159 (mod 2,881) = 7. 1,623 .0000159 (mod 2,881) = 8. 2,579 .0000159 (mod 2,881) = 9, 895 .0000159 (mod 2,881) = 10, 948 .0000159 (mod 2,881) =		D' 5 E' (mod (42.68))
5. We can decode using N=Co (mod N). Breaking down into each block, we know N is 2,881, Co's Each Individual block (which must be less than N) and D is ,0000159, so, doing each block individually: (which is probably wrong) 1. 1567,0000159 (mod 2,881) = All these become 2. 214 0000159 (mod 2,881) = individual then put 3. 1013,000159 (mod 2,881) = lagether and entrypt 4. 398,0000159 (mod 2,881) = 5. 581 0000159 (mod 2,881) = 6. 1,427,0000159 (mod 2,881) = 7. 1,623,0000159 (mod 2,881) = 8. 2,679,0000159 (mod 2,881) = 9, 895,0000159 (mod 2,881) = 10, 948,0000159 (mod 2,881) =		Di E'Imod 2, 112)
5. We can decode using M = Co (mod N). Breaking down into each block, we know M is 2,881, Co's back Individual block (which paust be less than N) and D is . 0000159. So, doing each block individually: 2 (which is probably wrong) 1. 1567 0000159 (mod 2,881) = All these become 2. 214 0000159 (mod 2,881) = individual than path 3. 1023 0000159 (mod 2,881) = together and energy) 4. 398 0000159 (mod 2,881) = 5. 581 0000159 (mod 2,881) = 6. 1,427 0000159 (mod 2,881) = 8. 2,679 0000159 (mod 2,881) = 9. 895 0000159 (mod 2,881) = 9. 895 0000159 (mod 2,881) =		Di 1109' (mod 2,772)
Into cuch block, we know M is 2,881, Cas Each Individual block (which must be less than N) and Dis, 0000159, so, doing each block individually: (which is probably wrong) 1. 1567-0000159 (mod 2,881) = All these become 2. 214 0000159 (mod 2,881) = individual then put 3. 1023-000159 (mod 2,881) = together and entryst 4. 398-0000159 (mod 2,881) = 5. 581-0000159 (mod 2,881) = 6. 1,427-0000159 (mod 2,881) = 7. 1,623-0000159 (mod 2,881) = 8. 2,679-0000159 (mod 2,881) = 9. 895-0000159 (mod 2,881) = 9. 895-0000159 (mod 2,881) = 10. 948-0000159 (mod 2,881) =		D·.0000159
into each block, we know M is 2,881, Cas Each Individual block (which must be less than N) and Dis. 0000159. So, doing each block individually: (which is probably wrong) 1. 1567-0000159 (mod 2,881) = All these become 2. 214 0000159 (mod 2,881) = individual then put 3. 1023-000159 (mod 2,881) = together and entryst 4. 398-0000159 (mod 2,881) = 5. 581-0000159 (mod 2,881) = 6. 1,427-0000159 (mod 2,881) = 7. 1,623-0000159 (mod 2,881) = 8. 2,679-0000159 (mod 2,881) = 9. 895-0000159 (mod 2,881) = 10. 948-0000159 (mod 2,881) =		
into cuck block, we know M is 2,881, Cas Each Individual block (which must be less than N) and Dis, 0000159, so, doing each block individually: (which is probably wrong) 1. 1567-0000159 (mod 2,881) = All these become 2. 214 0000159 (mod 2,881) = individual then put 3. 1023-000159 (mod 2,881) = together and entryst 4. 398-0000159 (mod 2,881) = 5. 581-0000159 (mod 2,881) = 6. 1,427-0000159 (mod 2,881) = 7. 1,623-0000159 (mod 2,881) = 8. 2,679-0000159 (mod 2,881) = 9. 895-0000159 (mod 2,881) = 9. 895-0000159 (mod 2,881) = 10. 948-0000159 (mod 2,881) =	5.	We can decode using M= Colmod N). Breaking down
Dis. 0000159. So, doing each block individually: (which is probably wrong) 1. 1567 0000159 (mod 2, 881) = All these become 2. 214 0000159 (mod 2, 881) = individual then put 3. 1023 0000159 (mod 2, 881) = together and energy) 4. 398 0000159 (mod 2, 881) = 5. 581 0000159 (mod 2, 881) = 6. 1,427 0000159 (mod 2, 881) = 7. 1,623 0000159 (mod 2, 881) = 8. 2,679 0000159 (mod 2, 881) = 9. 895 0000159 (mod 2, 881) = 10. 9418 0000159 (mod 2, 881) =		into each block, we know Mis 2,881, Cas each
1: 1567.0000159 (mod 2, 881) = All these become 2: 214.0000159 (mod 2, 881) = individual then put 3: 1013.000159 (mod 2, 881) = together and energy 4: 398.0000159 (mod 2, 881) = 5: 581.0000159 (mod 2, 881) = 6: 1,427.0000159 (mod 2, 881) = 7: 1,623.0000159 (mod 2, 881) = 8: 2,679.0000159 (mod 2, 881) = 9: 895.0000159 (mod 2, 881) = 10: 948.0000159 (mod 2, 881) =		individual block (which proust be Icss than N) and
1: 1567.0000159 (mod 2, 881) = All these become 2: 214.0000159 (mod 2, 881) = individual then put 3: 1013.000159 (mod 2, 881) = together and energy 4: 398.0000159 (mod 2, 881) = 5: 581.0000159 (mod 2, 881) = 6: 1,427.0000159 (mod 2, 881) = 7: 1,623.0000159 (mod 2, 881) = 8: 2,679.0000159 (mod 2, 881) = 9: 895.0000159 (mod 2, 881) = 10: 948.0000159 (mod 2, 881) =		Dis. 0000159. So, doing euch block individually:
2. 214 .0000159 (mod 2, 881) = individual ther pyt. 3. 1023 .0000159 (mod 2, 881) = 10gether and energyt. 4. 398 .0000159 (mod 2, 881) = 5. 581 .0000159 (mod 2, 881) = 7. 1,623 .0000159 (mod 2, 881) = 8. 2,679 .0000159 (mod 2, 881) = 9. 895 .0000159 (mod 2, 881) = 10. 948 .0000159 (mod 2, 881) =		* (which is probably wrong)
2. 214 .0000159 (mod 2, 881) = individual ther pyt. 3. 1023 .0000159 (mod 2, 881) = 10gether and energyt. 4. 398 .0000159 (mod 2, 881) = 5. 581 .0000159 (mod 2, 881) = 7. 1,623 .0000159 (mod 2, 881) = 8. 2,679 .0000159 (mod 2, 881) = 9. 895 .0000159 (mod 2, 881) = 10. 948 .0000159 (mod 2, 881) =	<u></u>	
2. 214 (mod 2, 881) = Individual Then 241 3. 1013 -0000159 (mod 2, 881) = 10gether and energy! 4. 398 -0000159 (mod 2, 881) = 5. 581 (mod 2, 881) = 6. 1,427 -0000159 (mod 2, 881) = 7. 1,623 -0000159 (mod 2, 881) = 8. 2,679 -0000159 (mod 2, 881) = 9. 895 -0000159 (mod 2, 881) = 10. 948 -0000159 (mod 2, 881) =	Y	
3. 10 (3 (Mod (, 801)): 10 gether and energy) 4. 398.0000159 (mod (, 881)): 5. 581 (mod (, 881)): 6. 1,427.0000159 (mod (, 881)): 7. 1,623.0000159 (mod (, 881)): 9. 895.0000159 (mod (, 881)): 10. 948.0000159 (mod (, 881)):		1. 214 (mod (, 881) - Individual then 247
4, 398 (mod 1,881)= 5, 581 (mod 2,881)= 6, 1,427.0000159 (mod 2,881)= 7, 1,623.0000159 (mod 2,881)= 8, 2,679.0000159 (mod 2,881)= 9, 895.0000159 (mod 2,881)= 10, 948.0000159 (mod 2,881)=		3 1013 (mod Cool) inderner and every)
5. 581 (mod (.881) = 6. 1,427.0000159 (mod 2,881) = 7. 1,623.0000159 (mod 2,881) = 8. 2,579.0000159 (mod 2,881) = 9. 895.0000159 (mod 2,881) = 10. 948.0000159 (mod 2,881) =		4. 398 (mod L, 801)=
7. $1,613.0000159$ (mod $2,881$) = 8. $2,679.0000159$ (mod $2,881$) = 9. 895.0000159 (mod $2,881$) = 10. 948.0000159 (mod $2,881$) =		5. 581 (mod (.081):
7. 1,623 (MOD (,081)= 8. 2,679.0000159 (mod 2,881)= 9, 895.0000159 (mod 2,881)= 10, 948.0000159 (mod 2,881)=		D. 1, 161
9, 895 · 0000159 (mod 2,881) = 10, 948 · 0000159 (mod 2,881) =		1. 1.623 (MOD (COSI)=
9, 895 (mod (, 881)= 10, 948 (mod 2, 881)=		0, 6,519
10, 10 ,		9. 895 (mod (, 881)-
11. 951 000015° (Mod 2,881)=		10: 110 (100)
		11. 951.0000159 (mod 2,881)=

012.0) : P(Q-1) - (Q-1) 0(2.Q) · (Q-1) · (P-1) Q(N) (P-1)[Q-7) Bound N' P', So We can write out a set from 1 to ?" where: {0,1,2, in, p, (p,1), (p,-1), p,3} Now we can scarch for which numbers ween't Or relatively prime to 3'. The numbers not relatively prime are the multiples of p. being D, p, 7p, etc. II's cycly p' number, so il is: