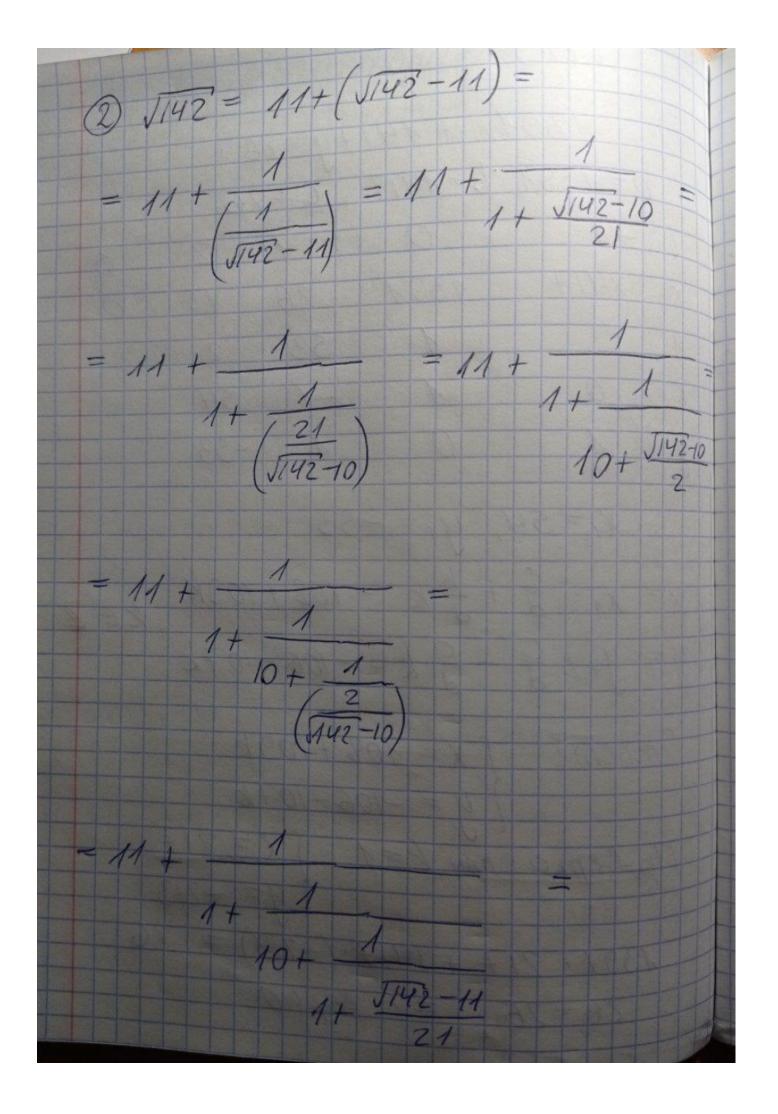
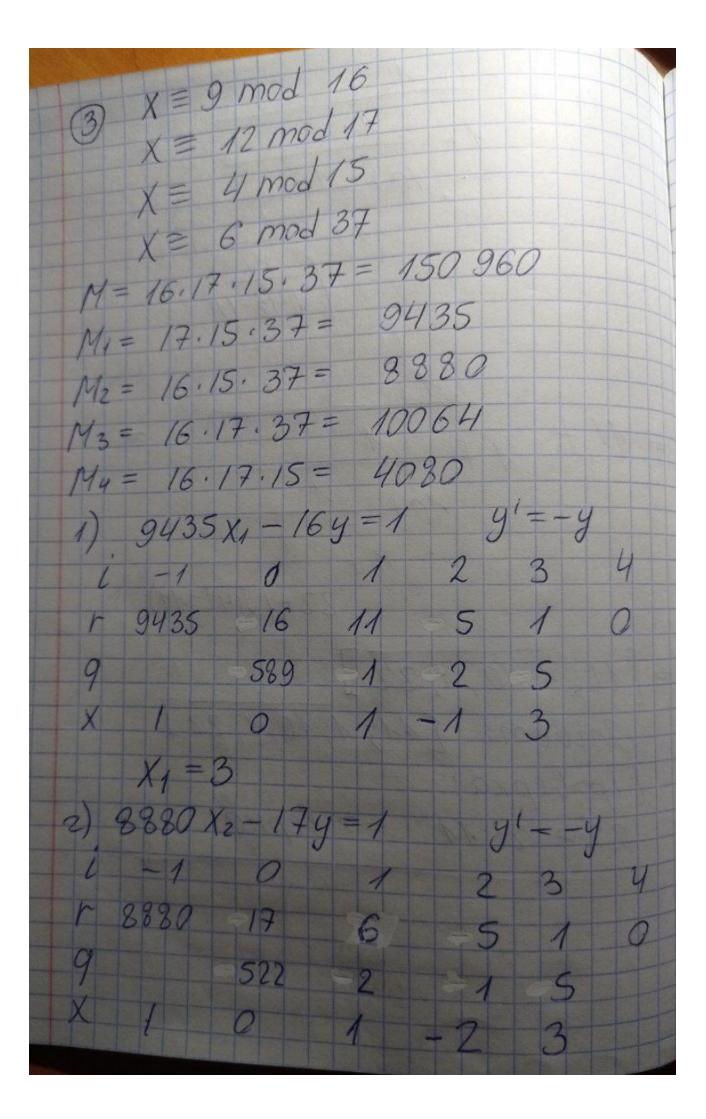
Овсенникова Bapuanm 10 Ombembi  $\begin{cases} X = 108 + 109k \\ y = -106 - 107k \end{cases}$ 2 [11; 1,10,1,22] 113929 9 mod 56 4  $x^{4} - 5x^{3} + 2x^{2} - 2x + 5$ 5 62 8 64 mod 67 [3;1,2,4,4,4] 9 10 2x2+2x+1

D 1391x + 14174 = 26 a=1391, b=1417, C=26 1-1 1417 1391 26 13 1 53 2 1 -53  $X_1 = 54$ ,  $Y_1 = -53$  $X = X_1 \cdot \frac{C}{d} + \frac{b}{d}k = 108 + 109k$   $Y = Y_1 \cdot \frac{C}{d} - \frac{9}{d}k = -106 - 107k$   $k \in \mathbb{Z}$ Ombem! [X=108+109k 2y=-106-107k 1391.217 + 1417. (-213) = 26 26 = 26 => Bepno



= 11 + 1+-1
22+(5142-11) = 11; 1,10,1,22] ambem: [11; 1,10,1,22] Apobepka: 22 = 2.11 => BEPHO



X2 = 3 3) 10064 X3 - 154 = 1 y' - - 4 r 10064 670 4) 4080 X4 - 374 = 1 4080 37 10 7 110 3 4-11 X4= -11 X= (9435.3.9+8880.3.12+10064.(-1).4+ 4080. (-11). 6) mod 150960 = = 264889 mod 150960 = 113929 ambem: 1/3929

1/3 929; 13 1/3 929; 13 1/3 929; 15 1/3 929; 33	6 = 71 $1 = 670$ $1 = 753$ $1 = 307$	15 (oct 9 (oct	(4)
$9 = 17^{37}$ $25^{17}$ $4 = 17^{37}$ $9(56) = 7$ $6 = 17$ $8 = 17$	24		
37,0 = 100 a; c 1 1 1 0 17 0 17 1 1 1	289 289	289 17 289 17	C <sup>2</sup> a mod k

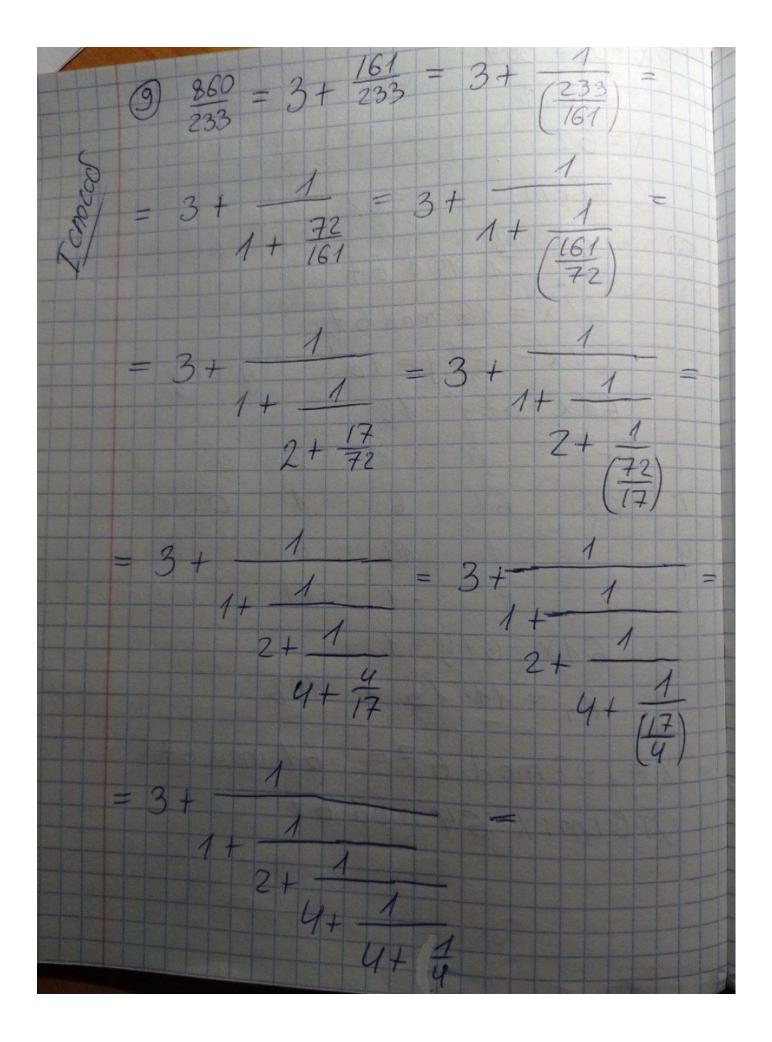
25 24n+8 mod 56 = 25240, 258 mod 56= = 25° mod 56 25 17 mod 56 = C 1710 = 100012 C Cz C²a c²a modk a; 1 1 25 25 25 625 625 9 81 81 25 25 625 625 9 81 2025 C= 9 mod 56 Ombem: 9 mod 56 5 deg  $p(x) \leq 4$ o p(-1) = 15 p(2) = -15 2 p(5) = 45

 $P(x) = \frac{15(x-2)(x-5)(x-4)(x-1)}{(-1-2)(-1-5)(-1-4)(-1-1)}$ 15 (X+1)(X-5)(X-4)(X-1) (2+1)(2-5)(2-4)(2-1)  $+\frac{45(x+1)(x-2)(x-4)(x-1)}{(5+1)(5-2)(5-4)(5-1)}$ 35 (X+1)(X-2)(X-5)(X-1) (4+1) (4-2) (4-5) (4-1)  $+\frac{(x+1)(x-2)(x-5)(x-4)}{(1+1)(1-2)(1-5)(1-4)} =$  $=\frac{1}{12}\left(X^{4}-12X^{3}+49X^{2}-78X+40\right)$ 1(5x4-45x3+95x2+45x-100)+ + \$ (5x4-30x3+35x2+30x-40) + + 6 (7x4- 49x3+63x2+49x-70) 1/(x4-10x3+27x2-2x-40) =

= X4/12 - 6 + 8 + 7 - 14) + + X3(-1+45-30-49+10)+ + X2 (49 - 95 + 35 + 63 - 27) + + X (- 78 - 45 + 30 + 49 + 24) + + (40 + 100 - 40 - 70 + 10) =  $= x^4 - 5x^3 + 2x^2 - 2x + 5$ Ombem: p(x) = x4-5x3+2x2-2x+5 Проверка! p(-1) = 1+5+2+2+5=15 P(2) = 16-40+8-4+5= -15 p(5) = 625-625+50-10+5=45 P(4) = 256 - 320 + 32 - 8 +5 = -35 P(1) = 1-5+2-2+5 = 1

6  $x^4 - 5x^3 - 6x^2 + 7x - 2 = 0$  $\frac{P}{9} = \frac{\pm 2}{\pm 1} = \pm 2$ Orbem! payuonanonoux kopned he unicetal, T.K. Kozgogninguент при стариим чиене paben 1 7 4x+70 = 460 (8 c.c.) 460 37014 70 34 76 370 -30 4x = 460 - 704X = 370 $X = \frac{370}{11}$ 76 = 7.8+6 = 6210  $X = 62_{10}$ Ichocos 4x+70=460 40 = 410 709 = 7.8 = 5610 4600 = 4.8+6.8 = 30410

4x +56 = 304 4x = 248 X = 62Ombem: x = 62 3 X = 18 mod 67 61x = 18 mod 67 4'=-4 61x - 674 = 18 61x + 67y' = 18r 67 61 6 11 1-61x+67y'=1 X1 = 11.18 = 198 X=198 mod 67 = 64 mod 67 076cm: x=64 mod 67



= [3; 1,2,4,4,47 4+1 I cnocod 860 = 233 · (3) + 161 233 = 161 1 1 + 72 161 = 72 / 2 | + 17 => 860 = [3;1,2,4,4,4] Ombem: [3;1,2,4,4,4]

10 2x3+2x2+x+1 6 Rolling 37 [x]  $2x^{5} + 0x^{4} + 0x^{3} + 0x^{2} + 0x + 0 \mid 2x^{3} + 2x^{2} + x + 1$   $2x^{5} + 2x^{4} + x^{3} + x^{2}$ X2+2x+2  $- x^{4} + 2x^{3} + 2x^{2} + 0x$ X4+ X3+ 2x2+2x - X3+ X2+ X+0 - X3+ X2+ 2x+2 2x2+2x+1 Apobepka: (2x3+2x2+x+1)x2+2x+2)+2x2+2x+1=  $= 2x^{5} + 0x^{4} + 0x^{3} + 0x^{2} + 0x + 0 = 2x^{5}$ => BEPHO ambem: 2x2+2x+1