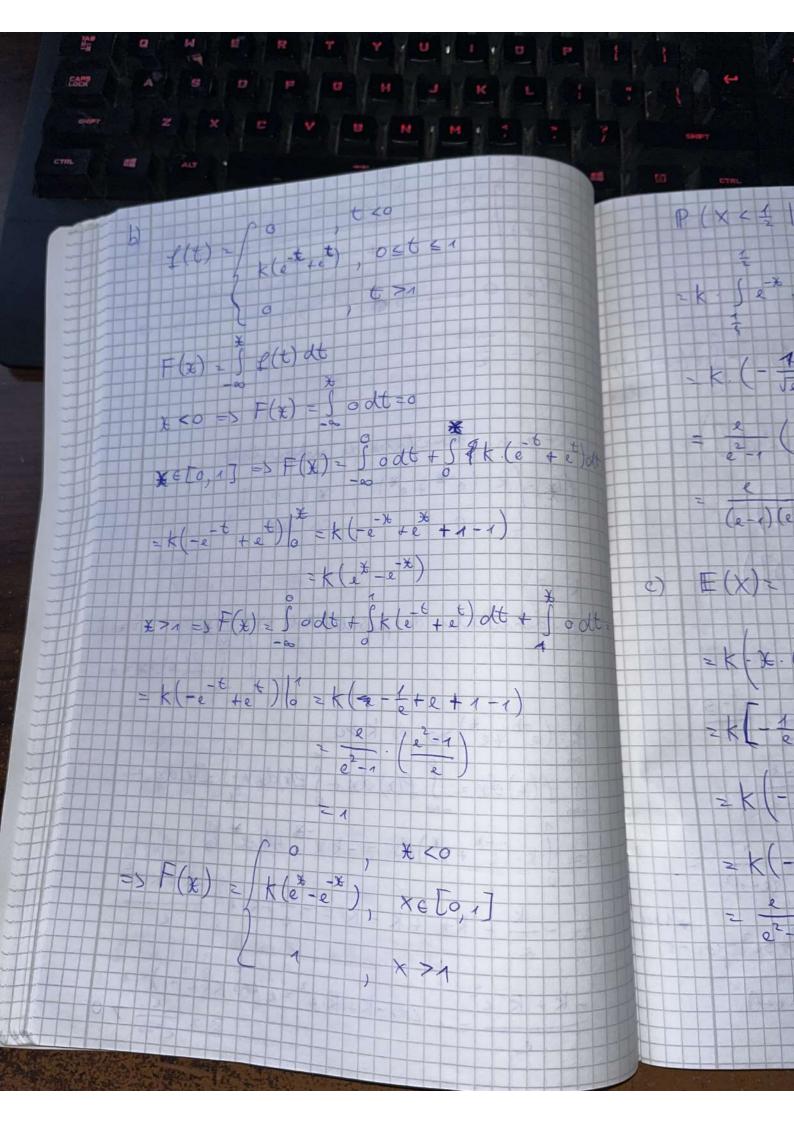
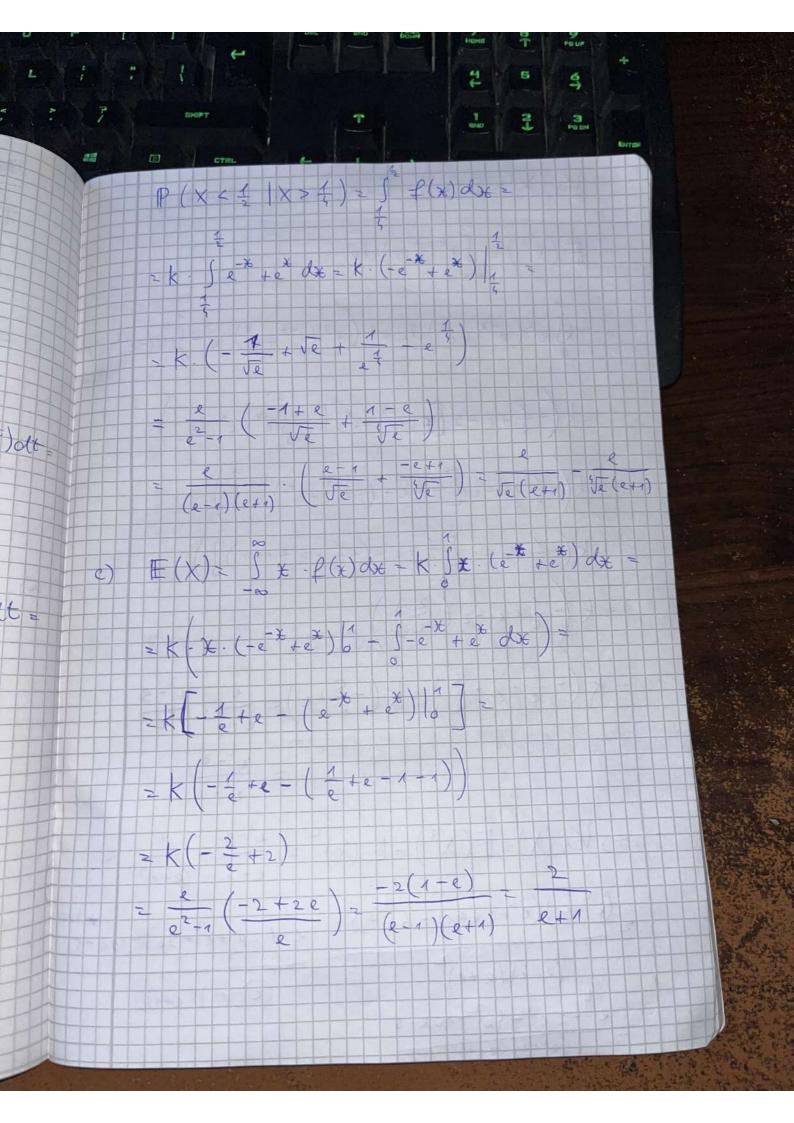
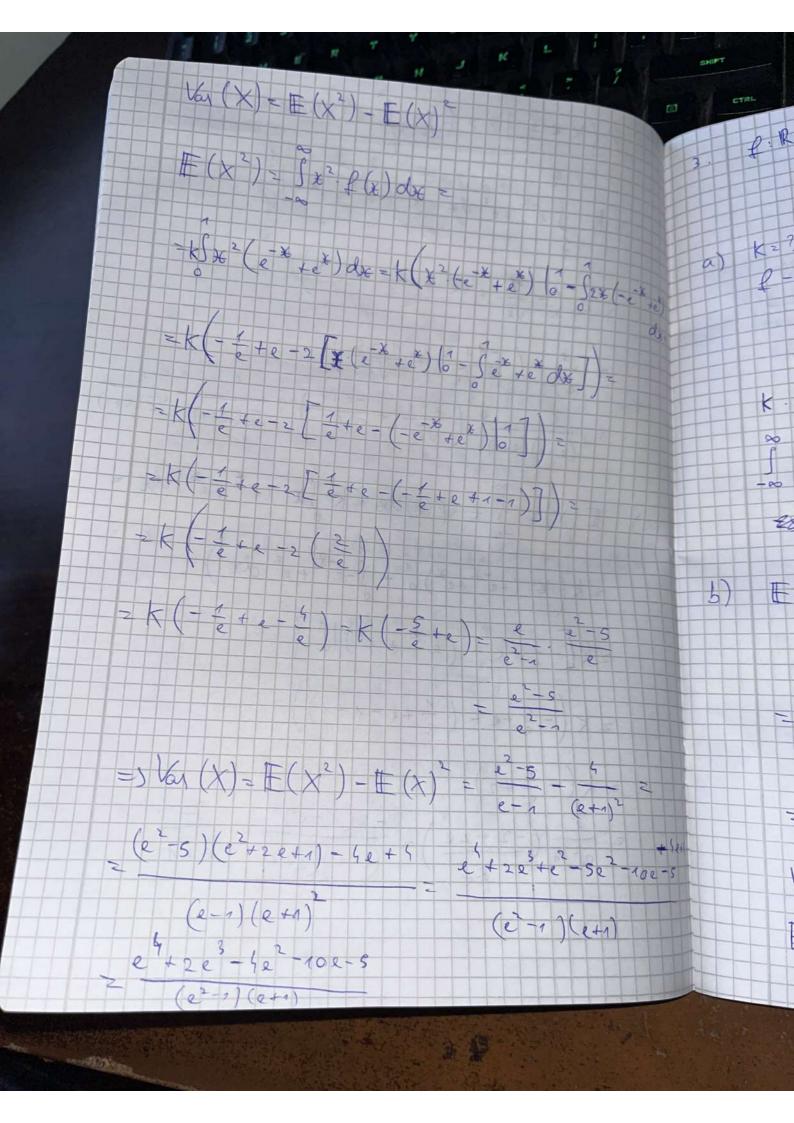
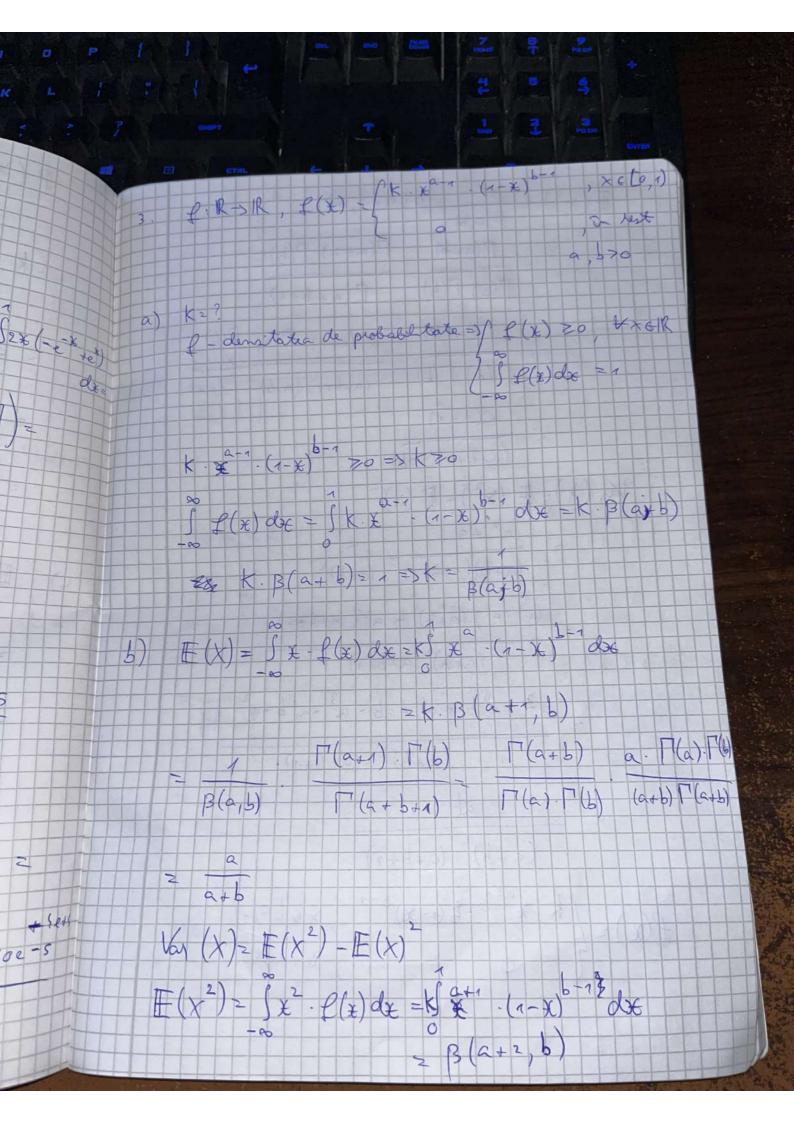


odt f(x)/ 307100 X-v.a., denstates de probabilitate f(x)=[k.(e*+e*), * E [0,1] f-densitates de probabilitate >> (\$ (x) >0; VxcIR S & (*) dx = 1 K. (ex +ex) >0 => K 70 $\int_{-\infty}^{\infty} f(x) dx = \int_{-\infty}^{\infty} f(x) dx + \int_{0}^{\infty} f(x) dx + \int_{0}^{\infty} f(x) dx = \int_{0}^{\infty} f(x) dx = \int_{0}^{\infty} f(x) dx + \int_{0}^{\infty} f(x) dx + \int_{0}^{\infty} f(x) dx = \int_{0}^{\infty} f(x) dx + \int_{0}^{\infty} f(x) dx + \int_{0}^{\infty} f(x) dx = \int_{0}^{\infty} f(x) dx + \int_$ = \(\langle \) - K + K · e = 2 = 2 (2) - K + K · e = 2 (2) - (2 -1) = 2 K = 1 70







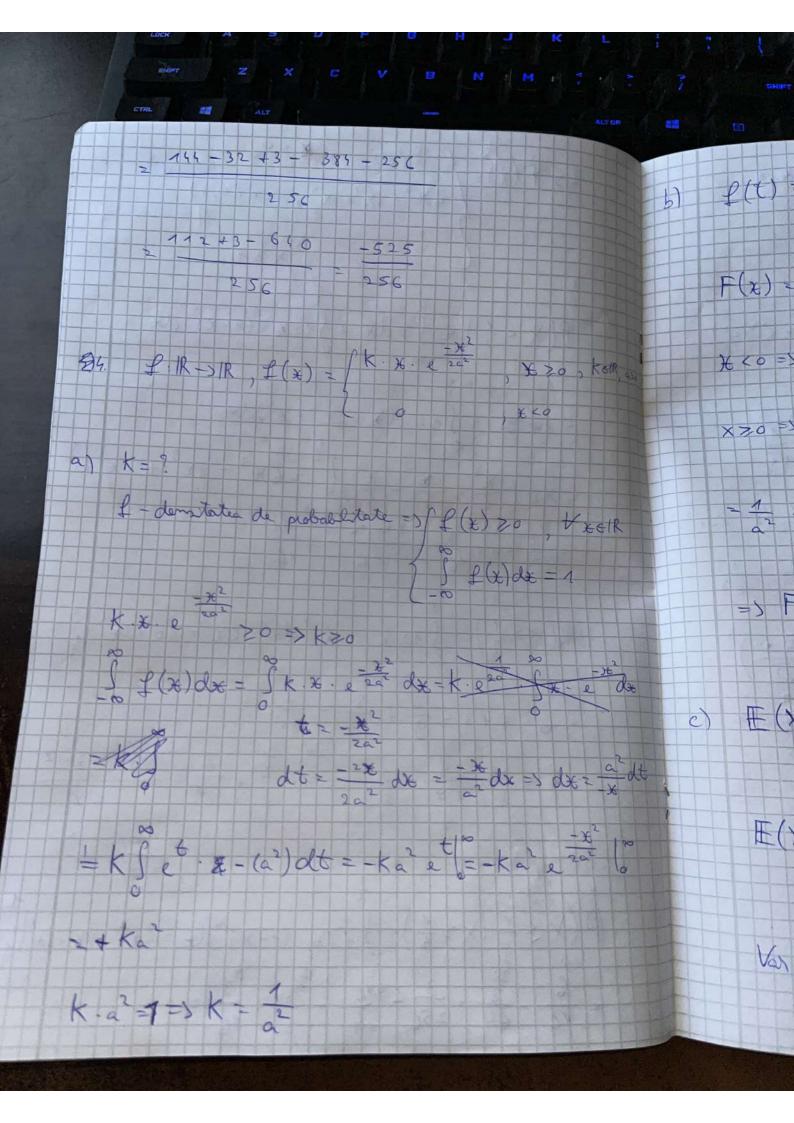


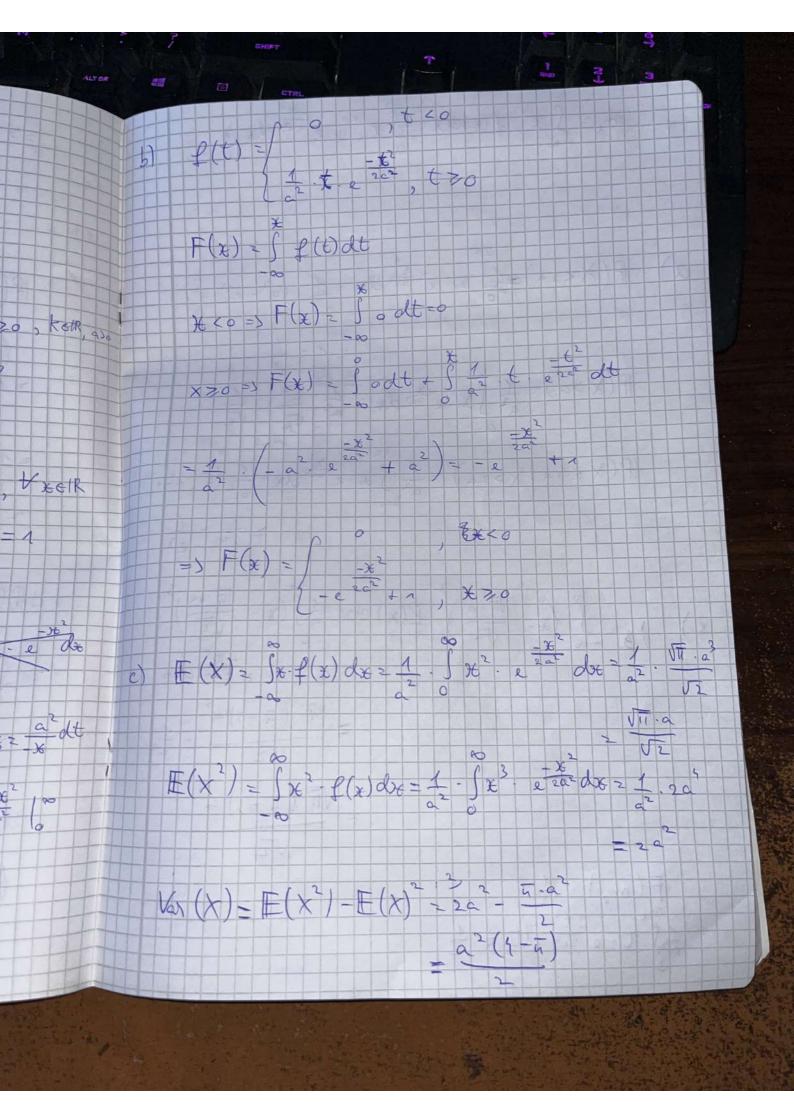
TE V B M M M M T M T T T 1 B(a+2,6) £ (x) 2 K $\mathbb{E}(x^2)$ $\beta(a,b)$ $\Gamma(a+2)$ $\Gamma(b)$ F(a) F(b) F(a+b+2) [(a+5) a. (a+1) - [(a) . [(b) [(e).[(b) (a+b+1).(a+b) [(a+b) £'(x) a (a+1) £(*) (a+b+1)(a+b) Van (X) = E (X2) - E (X)2 a2 + a (a+b)(a+b+1) (a+b)2 (a) +a) (a+b) + a2 (a+b+1) (a+b) (a+b+1) a3+ab+a+ab-a-ab-a B(a) (a+b)2-(a+b+1) ab (a+b)2. (a+b+1) T((* * - \$ (1- x) b-1 , x & [0,1) la Em lest

(b-1) · (1-X) b-2 , x6[0,1) f'(x) 1 + (pt. a, 5 24 ran a, 5 44) 1 - (pt. a) 1 2 5 40 sale (news) £'(x) £(x) K (1) atb-2 => m= = 1 $m_{\chi^2} = \sum_{n=0}^{\infty} \frac{1}{n} \left(\frac{1}{n} \right) dx = \sum_{n=0}^{\infty} \frac{1}{n} \left(\frac{1}{n} \right) dx$ B(a1) B(a+1,b) - [(a+1) [(b) [(a)-F(b) [(a+b+1) [(a). [(b) } - (a+b+1-1) - (a+b+1-2) - 1 - (a+b+1-1). [(a,b) = (as1-1) (a+1-2) (a+1-1) (a+b+1-1)(a+b+1-2)... (a+b+1-2)

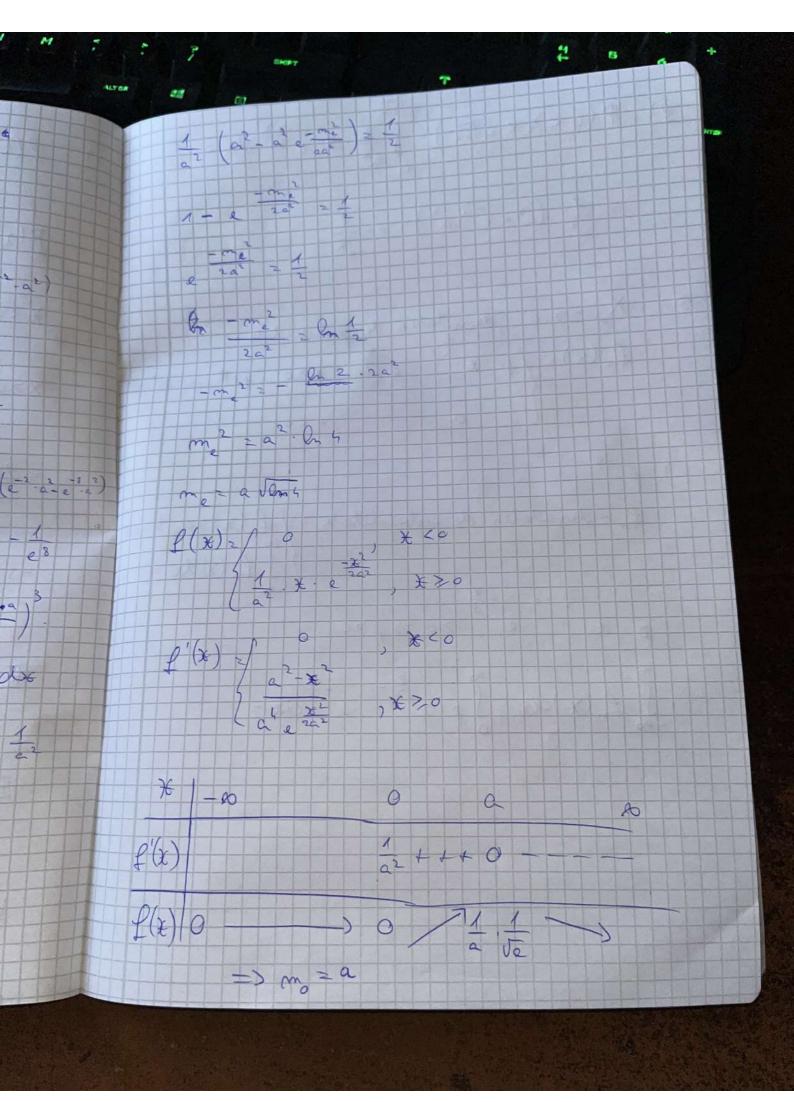
#11 a=2;b=3=>K=1 B(2,3) [7(2) [7(3) 1!] => g(t) = p 0 , t <0 12. t. (1-t) te[0,1) 6 , 6 >4 $F(x) = \int f(t) dt$ * <0 => F(x) = 5 odt =0 x ∈ Lo, 1) => F(x) = Sodt + S12 t. (1-t) dt = =12 St-2t2+t3dt212(t2-3t3+5)0 X>1=5 F(x) = Sodt + S12t. (1-t) dt + Sodt $-12\beta(2,3)=12.$ $\Gamma(2).\Gamma(3)$ 212. $\Gamma(5)$

=> F(x)= IP(X = 1) = S o DE + S12X - (1-X)2 de = 2 12 - (X - 2X + X3) dx =12 (X 2X X) | 2 6X - 8X + 3X | 5 P(X > 1) = 5 12 x · (1x) dx = 6x - 8x + 3x 1 alt 16 < 1 x> 1/2 x · (1-x) dx = 6x - 8x +3x / 1=





on, = S x - f(x) dx = 15 x 141 e 200 dx 6 P(X<2a)=15 x. e 22 dx = 1 (a2 - e2 - a2) (P(X≤ 1a) X>2a) = 1 Sx. e 20 dx = 1 (e -2 -2 -1) (x- JT-a) P(x) Ob = (x- JT-a) 2 1 (1 - 3) 2 - 1 VII (- 3) a F(me) = 1 me 15 t. e 2e dt = 1



e) IP (0 < X < a Jan) = \$ 1 x e 20 dx = a) p = ? for densitates de probabilitate =) for (x) 20, tx 61R