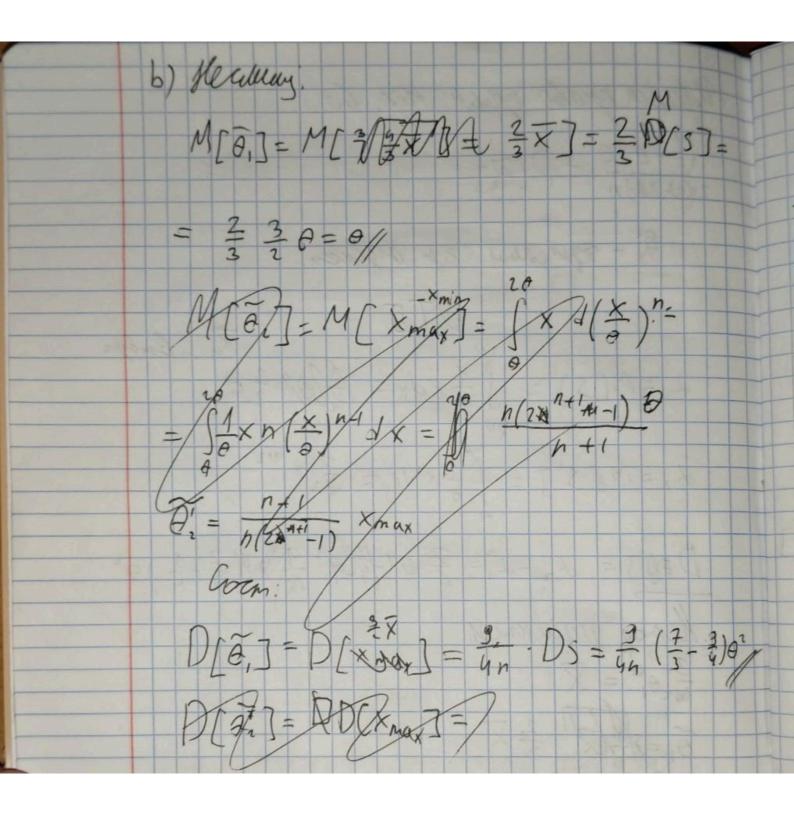
$$f(x, \theta) = \theta \{ (0, 1) \} + f(0) \cdot \{ (0, 1) \} +$$

hemog howerens. $\lambda_1 = \frac{1}{n} \times \frac{1}{2} \times \frac{1}{2}$ $\hat{\mathbf{x}} - 2\theta = \overline{\mathbf{x}} \implies$ $\Rightarrow \hat{\mathbf{e}}_{1} = \frac{\mathbf{x} - \overline{\mathbf{x}}}{2}$ Heavengemount M-2000 "24 } u ADAR HOS MMN. L(0) = 0 n-4. (1-0)4 LnL = ((n0)-(n-4)+((n(t-0))-4 -> max 0=()=(n-4) f +- 1-0 $O = (n-u)(\frac{1}{2}-\theta) - u\theta$ 0 = 1 - 10 - 4 + 40 - 40 or na= n-u $\tilde{g} = \frac{1}{2} - \frac{u}{2n} - \frac{1}{2} - \frac{1}{2}$

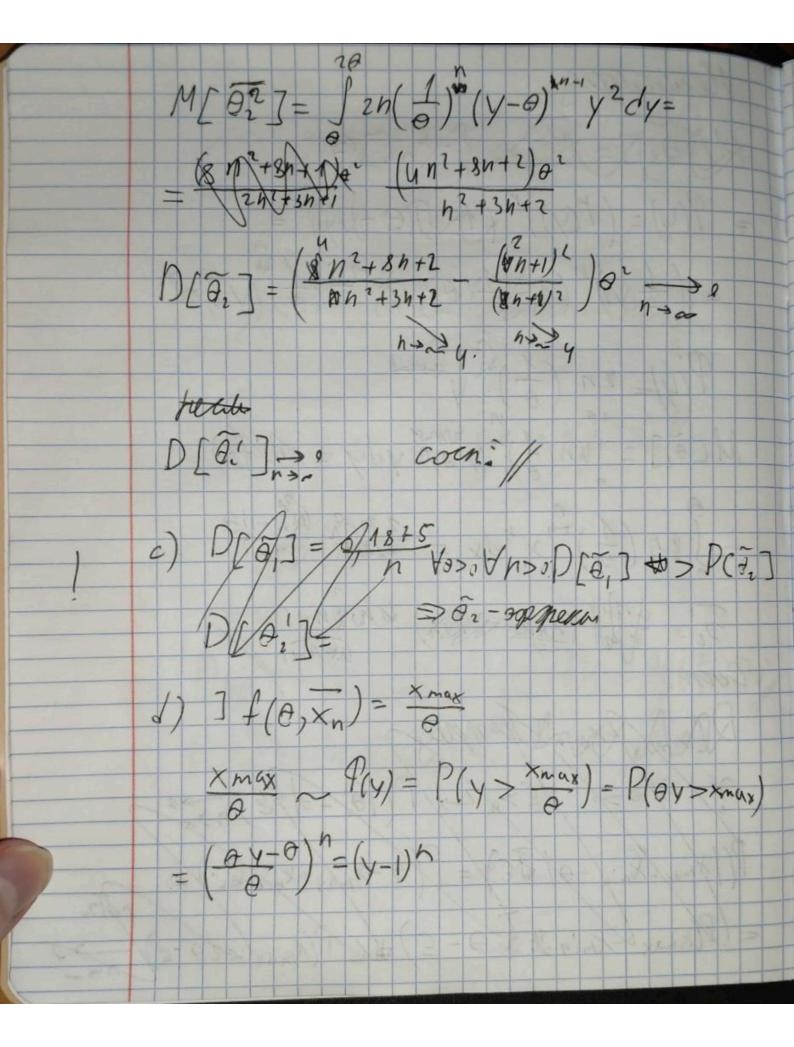
b) Sleed:

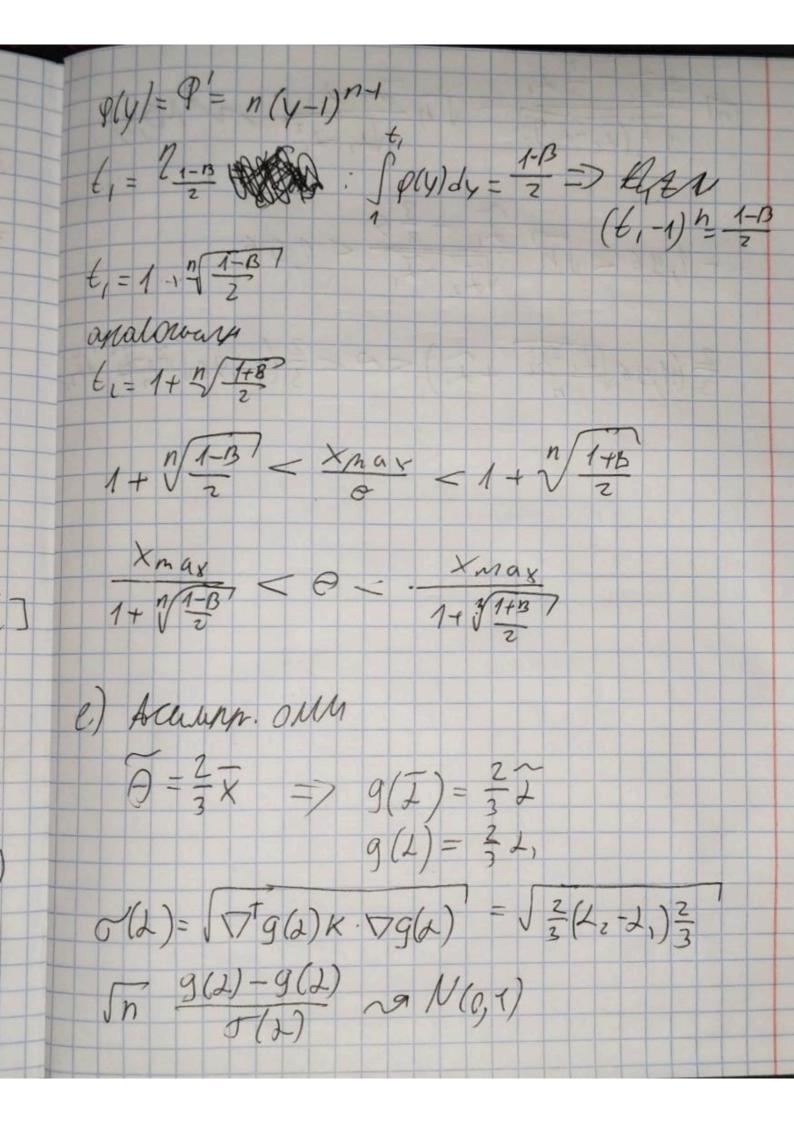
$$M[\vec{\theta}] = M(\frac{1-x}{2}, \vec{x}) = 1 - \frac{1}{2} M_{1}[\vec{x}] = \frac{1}{2} - \frac{1}{2} M_{1}[$$

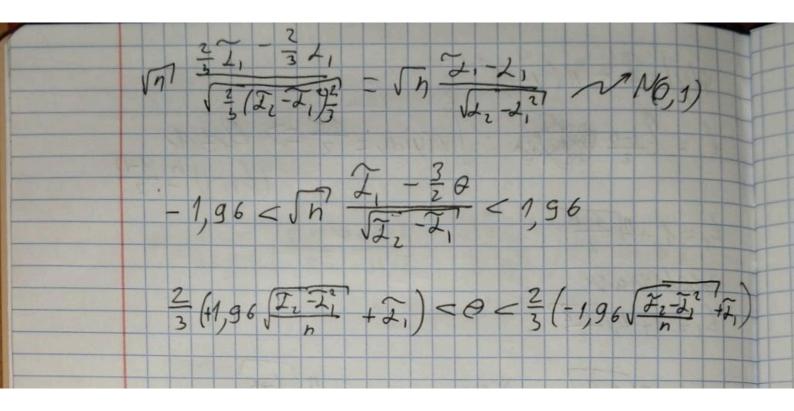
c) D[ē,]4 D[e,] orp. no V[a,6] e[o, \frac{1}{2}] => 5, u o. - peysu. no goin, ya Peryugenooms lugele 1) $p(x, \theta)$ hepp. no θ ha H2) $\int \frac{\partial}{\partial \theta} p(x, \theta) dx = \int dx + (-1) \cdot 2 = c_f$ $\frac{\partial}{\partial \theta} \int P(x,\theta) dx = 0$ 3) I (() = M[0 (n P(x, 0)] = $=2\left(\frac{24(\frac{1}{2}-\theta)}{2\theta}\right)^{2}\left(\frac{1}{2}-\theta\right)+\int\left(\frac{2\theta}{2\theta}\right)^{2}\theta dx=$ Willelin mato mus. Her. to. $\frac{(\frac{1}{2}-\theta)\theta}{2\sqrt{3}\sqrt{3}\sqrt{3}\sqrt{3}} = P(\tilde{\theta}_2)$ Fr - Age cause app oyence 1.=M(S) = \$\frac{1}{6}\times dx = \frac{1}{4}\text{(B} \tau^2 \text{0} Kemoy malumish 3 60 = X O, = 3/4/2/ 3 X AND: U WWW. L(a) = 3n AG = max SUXLY - Emgx HERRY 601 - 1000 A = Know + older

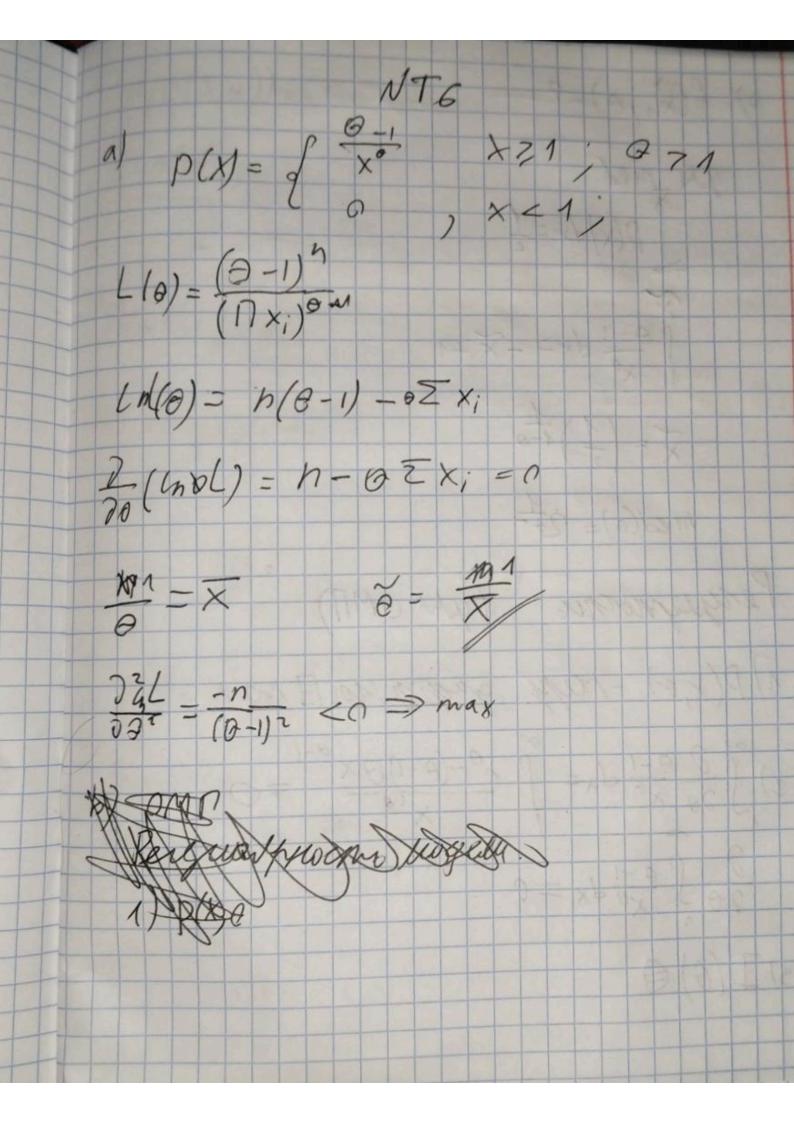


Herically = 9(4) = ((4)) " (A) = (1 () () 1 () 1 () m $P(y) = 2n \left(\frac{1}{\theta}\right)^{2n} y^{2n-1}$ $M[\tilde{\theta}_{i}] = \int_{0}^{1} 2n \left(\frac{1}{\theta}\right)^{2n} y^{2n-2} y dy = 2nl$ $=\int_{0}^{\infty} y n \left(\frac{1}{9}\right)^{\frac{n}{1-n}} x n dx = \frac{2}{3} \frac{n}{1-n} \frac{n}{3} \frac{(n+1)}{3}$ 71 - 2 6 (Xmax - Xm) 62 8 11 - 11









b) f(xn,0)-9 gh mes $\int P(x)dx = \frac{1}{2}$ JO-1 dx = -X+1 $\overline{X} = \left(\frac{1}{2}\right)^{\frac{1}{1-0}}$ med(0) = 20-Perylegnorms (gh OMI) 1) P(x, o) - tepy gugppy 1101 F no a 2) $\int \frac{\partial}{\partial \theta} \frac{\partial}{\partial x^{\theta}} dx = \int \frac{\partial}{\partial x^{\theta}} \frac{\partial}{\partial$ $\frac{\partial}{\partial \theta} \int \frac{\theta^{-1}}{x^{\theta}} dx = 0$ 3) I(0) @

$$U(p(x,e)) = (n(e-1) - e (nx))$$

$$U(p(x,e)) = \int_{0}^{\infty} |-c_n x|$$

n N(0,1) (g(0) cm2) < 3(0) + 3(0) 4n $\frac{g(\delta) \cdot (n_2)}{(\delta + 1) \cdot \sqrt{n}} < g(\delta)$ 9(8)a N(0,1) 7 8 - 8 N (0,1) < 0< 1,96 (0-1) + n \\ \(\tau_n\) -1,96 (0-1) + N