PREDZAVRŠNI ISPIT O

X,..., Xn e [3, X] o progenu dulline intervala

dulyina = 12-3

 $z = \max\{x_1, ..., x_n\} - 3$

varijabla STATISTINA JE NEPRISTRONA busininiano bo rojoj

ato re ocerivative reduction

E(2)=19

(xf(x)dx)

Xi ~ U[3, X]

1(x)= + F(x)= x-3, XE[3,K]

X = max { X1, ..., Xn } ato, he max < x , ondo he state may i od x

Fx(x) = P(x < x) - P(max &x,..., xn) ex) =

= P(X, CX,..., Xn C X) = NEZAVI SNOST ! =

= P(x, < x) P(x, < x) =

= Fx, (x)... Fxn (x) = (x-3)

1x(x)=F'(x)=n. (x-3)n-1= (x-3)n. (x-3)n-1

E(z)= E(x-3) = E(x)-3 = (x - 3/n (x-3/n (x-3))-1 dx - 3 =

 $(x-3-t) = \frac{n}{(x-3)^n} \int (t+3) t^n dt - 3 =$

 $= \frac{n}{(x-3)^n} \left[\frac{t^{n+1}}{n+1} + 3 \cdot \frac{t^n}{n} \right]^{\frac{n}{n-3}} = \frac{n}{n+1} (x-3)$

AVANTELIALE MEDELIZIENTS

1+1 (x-3) x x-3

DA BUDE NEPRISTRANA :

Z = 141 (x-3)

· da loi loila valjaua moramo racunati dispersiju

BINOMNA RAZDIOBA - dopodaj se dogodio k puta od n XNB(0,p) = B(4,p) (Rosson - intenzitet dolazaka /u sat veemena x auti, dr sot y...) METODOM NAILECE PRILEDNOSTI PROGUNOVAMO nepoznati parametar! Z(p, x1, x2, x3) = P(x=x1) . P(x=x2) . P(x=x3) = 3 pokusa parameter p P(X=K)=(1/K)pk(1-p)^-k 2) BINOMNAAAA...& Z(P(X) X2, X3) = P(X=1) P(X=3) P(X=0)= = (4) p (1-p)3 (4)p3 (1-p) (4) p0 (1-p)4 = = 16p4 (1-p)8 - derivirati po porometru i izredinatiti s o Cn L = ln 16 + 4lup + 8 ln (1-p) $\frac{d\ln L}{dp} = \frac{4}{p} + \frac{8}{1-p}(-1) = 0$ 4 (1-p) = 8p 4-4p=8p 4=120 $P=\frac{1}{3}$ THE OF SE

3.
$$f(x) = \lambda x^{\lambda-1}, x \in (0,1)$$

4,

* koustaute!

$$\frac{d}{dx} \ln L = \frac{\lambda}{\lambda} + 1 \cdot \ln (x_1 ... \cdot x_N) = 0$$

$$\frac{\Omega}{\lambda} = -\text{Im}(x_1, \dots, x_n)$$

$$\lambda = \frac{-n}{\ln(x_1 \dots x_n)} = \frac{-n}{\ln \pi x_1}$$

Wormalni zakon s nepoznatim parametrima:...

a) tockaste procjene za ocetivanje

$$\bar{X} = \frac{\sum n_i x_i}{n} = 126.6$$

disperziju:

MOROMO PISATI FORMULE!

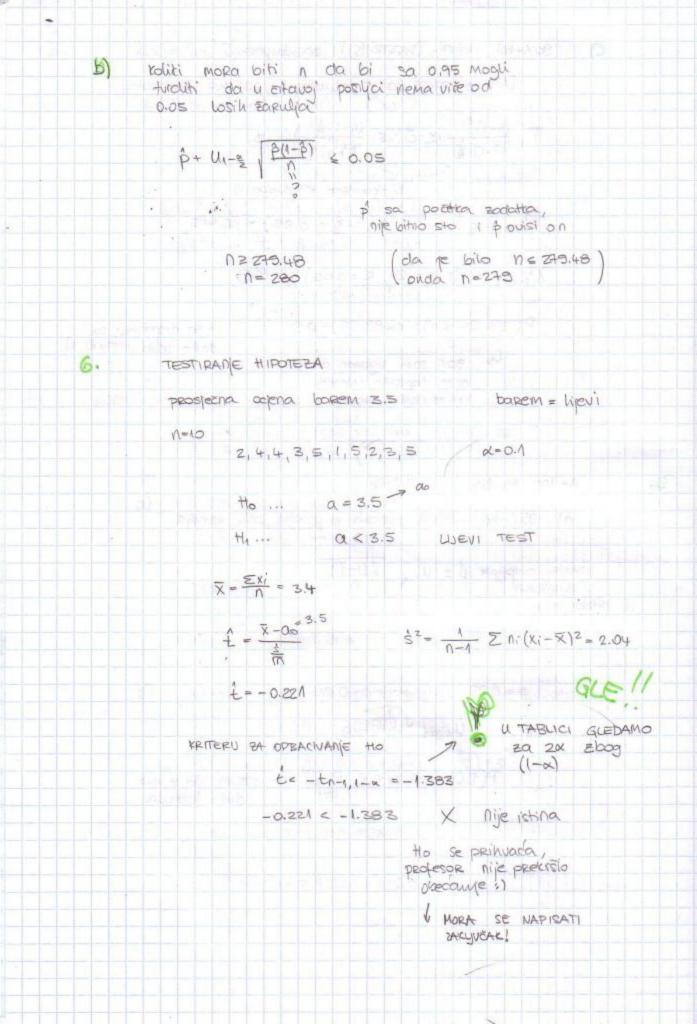
(a ne samo wurshiti 1))

$$\dot{S}^2 = \frac{1}{n-1} \sum n_i (x_i - \bar{x})^2 = 54.5$$

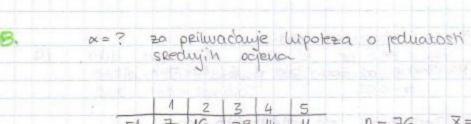
90%-thi interval povjerevnja za očetivanje (formulicee) 10

tn-1,1-8 = (n-1=24, x=0.1)=1711

5.



24-starta - tuprica hedi Na vzoreku od 500 bilo ne 16 škartnih. A = 0.05 Declaración nece valgati also ima vise da zx starta. to .. P= 0.02 HIPOTEZA O PROPORCIJIODO th prooz $\hat{u} = (\hat{p} - p_0)\sqrt{\frac{n}{p_0(l-p_0)}} \qquad \hat{p} = \frac{16}{500}$ Q= 1917 û > Un- ~ > KRITERU ZA ODBACIVANJE to U1-x= U0.95 = 1.64485 1.917 > 1.64485 W Obacwemo tto.
Troppica laže



to a1 = az

H1 ... Q1 # QZ

$$S_z^2 = \frac{1}{n+m-z} \left[(n-1)S_x^2 + (m-1)S_y^2 \right] = 1.358$$

KRITERIO EA ODBACIVANJE HO

12/> tn+m-2,1-2

o nemamo a nego pita kad možemo prilwatiti Lipotezu

Ho primadamo: It/4 tn+m-2,1-== (n+m-2=152,1-==?)

