Contractor of standard result		Station	snes	- Lu	were	uchua	11	بيعنده	20416	7	1	13 /4	
Ali Mu	liam	mad	l de	ad.			7.	3.7	1. 4	#0	(X)A		
	2007	190						200		1 53	in the		
						5 3	120	(41)	500	À			
03) (a) E	Shima	ti 2		N	2 406)	ol s	2.5	. 4	5 70	7		
Ci	, ,		[213)	(0)+			-+ 10	5)]	1400	2	0.63	325	
CL	: 1	T2 2	1.32	25				· A		5 V			
C3		K3 2	14 12	7.	1	1 7 6	المراة	34 ((13)	:35	013		114
Cy		X1 =	4.6	3		17	~ 0	9	(0)				
Control of	2, 20	2.682	5	1	21.3	225	1	13 2	1.3	4 13	1 2	4-67	2
(6) 95%	6 CI		3	1	Zd/2.	â	/N		1		.)		
	0.05		0/2	20.	025	N	Zi,	2.	1.96				
C_1 :	0.62						->	0.1	220	5±	0.0	300	,
C2 :	=>			± 0.			10 1	(to 1) (NX.		10-10	0
C3	2) .		0.13		0.34	Const	177	2.1	35.2	47		
Cy	: 2	4:	68 ±	0.2	12.	37		; s (8)3				
(c) P((zk)	2 7	/E!	·· e-3		L'C	N.	1-,0	X VI	,	lie		
Er.;	= P(x= k) - N	2 7	11.	-xi	N.	605	ic	51,2	2 4	2 .	J2 40
Eo,	20.	6855	10!	- E - 182	5 Y	00.7	70	2.14		1116	, 2,	1, ^	J2 70
The	table	e at	tache	1	help	0	Cinin	i de la	1201	70			-1
The	table	e_at	tadu	1	belo	w	Sum	mar	izes	Hu	. e	ripec	tel
The	table	e_at	tadu	1	belo	w	Sum	war	iizes	Hu	<u>.</u> e	ripec	tul
The Eq o	bser	ved	ov 2	J con	belo ues.	<u>دی</u> 5	<u>Sum</u>	mar	11783) \c.] 9	10	11	12
The Eq o	bser	e_at	tachu Ov	Josu	belo ues.	<u></u>	Sum	war	izes) NeJ	4.7	-	
n Observed 1 Expected 1 Observed 2	0 213 202.14 103	1 128 137.96 143	2 37 47.08 98	3 18 10.71 42	belo 4 3 1.83 8	5 1 0.25 4	6 0 0.03 2	7 0 0	8 0 0	9 0 0 0	10 0 0	11 0 0	12 0 0
n Observed 1 Expected 1 Observed 2 Expected 2	0 213 202.14 103 106.59	1 128 137.96 143 140.96	2 37 47.08 98 93.21	3 18 10.71 42 41.09	4 3 1.83 8 1359	5 1 0.25 4 3.59	6 0 0.03 2 0.79	7 0 0 0 0.15	8 0 0 0 0.02	9 0 0 0	10 0 0 0	11 0 0 0	12 0 0 0
n Observed 1 Expected 1 Observed 2	0 213 202.14 103	1 128 137.96 143	2 37 47.08 98	3 18 10.71 42	belo 4 3 1.83 8	5 1 0.25 4	6 0 0.03 2	7 0 0	8 0 0	9 0 0 0	10 0 0	11 0 0	12 0 0
n Observed 1 Expected 1 Observed 2 Expected 2 Observed 3 Expected 3 Observed 4	0 213 202.14 103 106.59 75 66.12 0	1 128 137.96 143 140.96 103 119.02 20	2 37 47.08 98 93.21 121 107.11	3 18 10.71 42 41.09 54 64.27 53	3 1.83 8 1359 30 28.92 86	5 1 0.25 4 3.59 13 10.41 70	6 0 0.03 2 0.79 2 3.12 54	7 0 0 0 0.15 1 0.8 37	8 0 0 0 0.02 0 0.18	9 0 0 0 0 1 0.04	10 0 0 0 0 0 0 0 0 0 0 5	11 0 0 0 0 0 0	12 0 0 0 0 0 0
n Observed 1 Expected 1 Observed 2 Expected 2 Observed 3 Expected 3	0 213 202.14 103 106.59 75 66.12	1 128 137.96 143 140.96 103 119.02	2 37 47.08 98 93.21 121 107.11	3 18 10.71 42 41.09 54 64.27	4 3 1.83 8 1359 30 28.92	5 1 0.25 4 3.59 13 10.41 70 69.44	6 0 0.03 2 0.79 2 3.12 54 54.16	7 0 0 0 0.15 1 0.8	8 0 0 0 0 0.02 0 0.18	9 0 0 0 0 0 1 0.04	10 0 0 0 0 0 0	11 0 0 0 0 0	12 0 0 0 0 0
n Observed 1 Expected 1 Observed 2 Expected 2 Observed 3 Expected 3 Observed 4	0 213 202.14 103 106.59 75 66.12 0	1 128 137.96 143 140.96 103 119.02 20	2 37 47.08 98 93.21 121 107.11	3 18 10.71 42 41.09 54 64.27 53	3 1.83 8 1359 30 28.92 86	5 1 0.25 4 3.59 13 10.41 70	6 0 0.03 2 0.79 2 3.12 54 54.16	0 0 0 0.15 1 0.8 37 36.21	8 0 0 0 0.02 0 0.18 18 21.18	9 0 0 0 0 1 0.04 10 11.02	10 0 0 0 0 0 0 0 0 0 0 5	11 0 0 0 0 0 0	12 0 0 0 0 0 0
n Observed 1 Expected 1 Observed 2 Expected 2 Observed 3 Expected 3 Observed 4	0 213 202.14 103 106.59 75 66.12 0	1 128 137.96 143 140.96 103 119.02 20	2 37 47.08 98 93.21 121 107.11	3 18 10.71 42 41.09 54 64.27 53	3 1.83 8 1359 30 28.92 86	5 1 0.25 4 3.59 13 10.41 70 69.44	6 0 0.03 2 0.79 2 3.12 54 54.16	7 0 0 0 0.15 1 0.8 37 36.21	8 0 0 0 0.02 0 0.18	9 0 0 0 0 1 0.04 10 11.02	10 0 0 0 0 0 0 0 0 0 0 5	11 0 0 0 0 0 0	12 0 0 0 0 0 0
n Observed 1 Expected 1 Observed 2 Expected 2 Observed 3 Expected 3 Observed 4	0 213 202.14 103 106.59 75 66.12 0 3.71	1 128 137.96 143 140.96 103 119.02 20 17.37	2 37 47.08 98 93.21 121 107.11	3 18 10.71 42 41.09 54 64.27 53	4 3 1.83 8 1359 30 28.92 86 74.19	5 1 0.25 4 3.59 13 10.41 70 69.44	6 0 0.03 2 0.79 2 3.12 54 54.16	7 0 0 0 0.15 1 0.8 37 36.21	8 0 0 0 0.02 0 0.18 18 21.18	9 0 0 0 0 1 0.04 10 11.02	10 0 0 0 0 0 0 0 0 0 0 5	0 0 0 0 0 0 0 2 2.19	12 0 0 0 0 0 0
n Observed 1 Expected 1 Observed 2 Expected 2 Observed 3 Expected 3 Observed 4	0 213 202.14 103 106.59 75 66.12 0 3.71	1 128 137.96 143 140.96 103 119.02 20 17.37	2 37 47.08 98 93.21 121 107.11	3 18 10.71 42 41.09 54 64.27 53	4 3 1.83 8 1359 30 28.92 86 74.19	5 1 0.25 4 3.59 13 10.41 70 69.44	6 0 0.03 2 0.79 2 3.12 54 54.16	7 0 0 0 0.15 1 0.8 37 36.21	8 0 0 0 0.02 0 0.18 18 21.18	9 0 0 0 0 1 0.04 10 11.02	10 0 0 0 0 0 0 0 0 0 0 5	0 0 0 0 0 0 0 2 2.19	12 0 0 0 0 0 0
n Observed 1 Expected 1 Observed 2 Expected 2 Observed 3 Expected 3 Observed 4	0 213 202.14 103 106.59 75 66.12 0 3.71	1 128 137.96 143 140.96 103 119.02 20 17.37	2 37 47.08 98 93.21 121 107.11	3 18 10.71 42 41.09 54 64.27 53	4 3 1.83 8 1359 30 28.92 86 74.19	5 1 0.25 4 3.59 13 10.41 70 69.44	6 0 0.03 2 0.79 2 3.12 54 54.16	7 0 0 0 0.15 1 0.8 37 36.21	8 0 0 0 0.02 0 0.18 18 21.18	9 0 0 0 0 1 0.04 10 11.02	10 0 0 0 0 0 0 0.01 5 5.16	11 0 0 0 0 0 0 2 2.19	12 0 0 0 0 0 0
n Observed 1 Expected 1 Observed 2 Expected 2 Observed 3 Expected 3 Observed 4	0 213 202.14 103 106.59 75 66.12 0 3.71	1 128 137.96 143 140.96 103 119.02 20 17.37	2 37 47.08 98 93.21 121 107.11	3 18 10.71 42 41.09 54 64.27 53 63.41	4 3 1.83 8 1359 30 28.92 86 74.19	5 1 0.25 4 3.59 13 10.41 70 69.44	6 0 0.03 2 0.79 2 3.12 54 54.16	7 0 0 0 0.15 1 0.8 37 36.21	8 0 0 0 0.02 0 0.18 18 21.18	9 0 0 0 0 1 0.04 10 11.02	10 0 0 0 0 0 0 0.01 5 5.16	0 0 0 0 0 0 0 2 2.19	12 0 0 0 0 0 0
n Observed 1 Expected 1 Observed 2 Expected 2 Observed 3 Expected 3 Observed 4	0 213 202.14 103 106.59 75 66.12 0 3.71	1 128 137.96 143 140.96 103 119.02 20 17.37	2 37 47.08 98 93.21 121 107.11	3 18 10.71 42 41.09 54 64.27 53 63.41	4 3 1.83 8 1359 30 28.92 86 74.19	5 1 0.25 4 3.59 13 10.41 70 69.44	6 0 0.03 2 0.79 2 3.12 54 54.16	7 0 0 0 0.15 1 0.8 37 36.21	8 0 0 0 0.02 0 0.18 18 21.18	9 0 0 0 0 1 0.04 10 11.02	10 0 0 0 0 0 0 0.01 5 5.16	11 0 0 0 0 0 0 2 2.19	12 0 0 0 0 0 0
n Observed 1 Expected 1 Observed 2 Expected 2 Observed 3 Expected 3 Observed 4	0 213 202.14 103 106.59 75 66.12 0 3.71	1 128 137.96 143 140.96 103 119.02 20 17.37	2 37 47.08 98 93.21 121 107.11	3 18 10.71 42 41.09 54 64.27 53 63.41	4 3 1.83 8 1359 30 28.92 86 74.19	5 1 0.25 4 3.59 13 10.41 70 69.44	6 0 0.03 2 0.79 2 3.12 54 54.16	7 0 0 0 0.15 1 0.8 37 36.21	8 0 0 0 0.02 0 0.18 18 21.18	9 0 0 0 0 1 0.04 10 11.02	10 0 0 0 0 0 0.01 5 5.16	11 0 0 0 0 0 0 2 2.19	12 0 0 0 0 0 0
n Observed 1 Expected 1 Observed 2 Expected 2 Observed 3 Expected 3 Observed 4	0 213 202.14 103 106.59 75 66.12 0 3.71	1 128 137.96 143 140.96 103 119.02 20 17.37	2 37 47.08 98 93.21 121 107.11	3 18 10.71 42 41.09 54 64.27 53 63.41	4 3 1.83 8 1359 30 28.92 86 74.19	5 1 0.25 4 3.59 13 10.41 70 69.44	6 0 0.03 2 0.79 2 3.12 54 54.16	7 0 0 0 0.15 1 0.8 37 36.21	8 0 0 0 0.02 0 0.18 18 21.18	9 0 0 0 0 1 0.04 10 11.02	10 0 0 0 0 0 0.01 5 5.16	11 0 0 0 0 0 0 2 2.19	12 0 0 0 0 0 0
n Observed 1 Expected 1 Observed 2 Expected 2 Observed 3 Expected 3 Observed 4	0 213 202.14 103 106.59 75 66.12 0 3.71	1 128 137.96 143 140.96 103 119.02 20 17.37	2 37 47.08 98 93.21 121 107.11	3 18 10.71 42 41.09 54 64.27 53 63.41	4 3 1.83 8 1359 30 28.92 86 74.19	5 1 0.25 4 3.59 13 10.41 70 69.44	6 0 0.03 2 0.79 2 3.12 54 54.16	7 0 0 0 0.15 1 0.8 37 36.21	8 0 0 0 0.02 0 0.18 18 21.18	9 0 0 0 0 1 0.04 10 11.02	10 0 0 0 0 0 0.01 5 5.16	11 0 0 0 0 0 0 2 2.19	12 0 0 0 0 0 0
n Observed 1 Expected 1 Observed 2 Expected 2 Observed 3 Expected 3 Observed 4	0 213 202.14 103 106.59 75 66.12 0 3.71	1 128 137.96 143 140.96 103 119.02 20 17.37	2 37 47.08 98 93.21 121 107.11	3 18 10.71 42 41.09 54 64.27 53 63.41	4 3 1.83 8 1359 30 28.92 86 74.19	5 1 0.25 4 3.59 13 10.41 70 69.44	6 0 0.03 2 0.79 2 3.12 54 54.16	7 0 0 0 0.15 1 0.8 37 36.21	8 0 0 0 0.02 0 0.18 18 21.18	9 0 0 0 0 1 0.04 10 11.02	10 0 0 0 0 0 0.01 5 5.16	11 0 0 0 0 0 0 2 2.19	12 0 0 0 0 0 0

O5) $X \rightarrow DPV$ $P(x21) 20$ $P(x22) 21-0$ x_{121}, x_{222}, x_{3} $E(x) = \frac{\sum_{k=1}^{2} P(x_{2k})}{2 - E(x)} = \frac{1.0 + 2(1-0)}{2 - 2 - x} = \frac{2-0}{2}$	22
E(X) = Zk.P(xzk) = 1.0 + 2(1-0) = 2-0	
$\partial z = E[x]$ $\partial z = -x$	
1 10 5 5 12	
8 = 2 - 513 2 1/3	
(ik (8) 2 f(x,,x,18) z f(x,18) f(x,18)	
20.(1-0)2	
log(lik(0)) = lu(0) + 2-lu(1-0)	
e'(0) = 10 - 2/1-0 = (1-30)/(0(1-0))	
(°(θ) = Θ 0 => θ z 43	
$\ell''(\theta) = (-3\theta^2 + 2\theta - 1)/[\theta \cdot (1-\theta)]^2$	
forx (0/2) = [fx10(x10).f(0)]/fx(1)	
$f_{x10}(x10) z O(1-0)^2$	
fn(n) = 50 fx10 (n10)	
$f_{\theta}(\theta) = 1, \theta \in [0,1].$	
Then Si 201. (1=12) dx = r(a). r(b) /r(a+b)	
f(a)z(a-1)!	
fx(n) 25° 0' (1-0)2. do 2 1/2	
foix (012) = 120(1-0)2. 0 2 1/3 (ik (0) 2 0(1-0)?	
forx (01x) 2 170(1-02)2	
-012 CO (2) 2 (20C (-0)	
07) E(x) 21/p P2 1/E(x) 82 1/x	
(16(0) 2 pu/1 2 xi-n	
(10) = 4 1 7 1 1	
1/0) 2 H - (5 Ni = 1/) -	
12(p) = p = (2ki 4) -p	
$(y') = -\frac{1}{2} = \frac{1}{2}$	
$\frac{1}{\sqrt{5}} \sim \frac{1}{\sqrt{5}} = 1$	
Var (p) ~ (h.1cp) 1(p) = t (15plu f(x1p))	
$\frac{Var(p) - \frac{1}{E(E(p))}}{E(p)^{2}(1,2)} = \frac{1}{2} \frac$	
E(e"(p)) z - M/p'(1-p)	
$\frac{\sqrt{\alpha r(p)} \sim \frac{r}{r} \frac{r}{n}}{\sqrt{1 + \frac{\sqrt{2}\pi r^{-1}}{n}}} = \frac{r}{r}$	
(41x) (x1p) 2p (1-p) 2 3 +xp(x1p)	
5 2 (1- χ) dx E(γ) 2 ab+b	
E(1)×/2 -12×i	
p 2 /x p 2 /x Var (p) = p2(1-p)/n	
	_

```
(213)
        2 2 3 × E(x2) 20/3
      E(a) =
                            [e(x1)]
                                    x € [-1,1
                       f(n) dn =
          2-E(2)/1/4(2)
          P(12) >0.5) = 2-20(
Q16)
        E(x) 2
                   2 ~2
                 子 E(X2)
                  lu(26)
       e(6)
                        - 2 B(12/1)+ --- - E(1X/1)/63
       E(e"(0)) 2
        F (1x1) = 6 [(2) 2.6.
                                  Var (6) 262/4
                      T(x)z|x) d(6)z lu (
             T = ZT(X) = Z/Xi
                                           2+1/2(2a+1)
  017) E(x2) = Var(x)+ [E(x2)]
            JE (x2)-)
                                      - \ZX3
                             + (a-1) Zlu(2; (1-xi))
       ( W)
             = u lu
           (x) = 0
                          - In Zly(24 (1-xi))
               ~
                  24 F'(x)- F(x)- F(w)2
                                  -4uf"(2x) F(2x)-F1(2x)-
         T= ZT(Xi) = ZIn(X2.(1-Xi))
```

Q19) f(n) 2 /6 \2x · e(n-r)/262
$lit(a6)$ 2 $-(x_1-x_1)^2++(x_1-x_1)^2$
GN2K 262
e'(6) 2 - 1 + 63 \(\tau_1 - \mu)^2
l'(6) 20 =) 6 7 [15(xe-M)2
M M
((M) 2 n In (an 2x) - 262 Z(xi-M)2
e(и) =0 => M2 2 Zni
h I (pr). II
THE RESERVE OF THE PROPERTY OF
021) E(X) 2 0+1 2) 02 E(X)-1 82 X-1
e(0) 2 u0 - Zxi
Tz X1 = min X2 => Tz X, > Sufficient.
032) M2X = 16 EX1 7 3.36109
$\frac{6^{2}z^{16-1}s^{2}=\frac{1}{16}\sum(x_{i}-\mu)^{2}z^{3}2045}{16^{3}}$
N(3.3G109, 3.2045)
>2 16-1 2 (Xi-X) 2 1- 3483.
2 8
6: 6 90% CI: [2.0509, 7.0623]
95% CF: [1:8651, 8:1904]
99% CZ: [1.65632, 11.1461]
=> 6° = \(62 => 90% CT : (1.4321, 2.6535)
050/6+ 5:
m = 4n
(4. 1/2 · 1/
The state of the s

45.5) E(X) 2 M/2 (2 M/2 M/2 M/2 M/2 M/2 M/2 M/2 M/2 M/2 M/
047) E(x) 25 2 (n x0,0) 2 Sq. xo. xo. dn
E(x) 2 & x. 20+1 2 0 16
0-1 0-1
=) 0 2 E(K) : 8 2 X
E(x)-2, X-2
((B) = n (n (B) + n B (n (xo) - (B+1) \(\frac{1}{2}\line{n}\)
e'(8) 2 & + u/u(x0) - 2/u(xi)
('(0) = 0 · => 0 = 1
立をしていうしいしての
("(B) = - 7 40 D = - 1
1 Zln(X2) - lu(20)
Var(0) ≈ ville) . E(e"(0)) 2 - 1/02
Var(8)≈ 02/11
12 In(xi) is sufficient
materia a complete of the state
00) E(x) 201 1/2 => 02 E(x), 2/x => 02 7/2/x
((0) 2 Zlu(xi) - Zulu(0) - 202 Zxi
('(0) = -2 + 0 = Zxi (0) = 0 = 0 = 1 = Zxi
0 z N zn 2 Xi
Var(0) = - (E(e"(0))
("(0) 2 2n - 3/04 Z Xi
$E(x^2) = 20^2 = Var(\tilde{o}) \approx \frac{0^2}{4n}.$
03) +14) (A+1)60; 0 (351x)-1) 6
052) E(X)2 (0+1)(0+2) 02 (2E(X)-1)/(1-E(X))
$\delta = 2\bar{x} - 1 \qquad \mathcal{L}(\theta)_2 \ln(\theta + 1) + \theta \sum \ln(x_i) .$
1-x
2'(0) = 1/0+1 + 2 lu(xi) => C(0) =0
=> 02 - (1+ /t Zlu(ni)) e"(0) 2 - "(0+1)2 : 20
Var(θ) 2 (0+1)2/n;
Var(0) 2 (0+1)2/n;
) 2 ZIV(Vi)
1.71-20 S. (90-20)
(1-0-4)47-8-(9)447-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
(33,1434-342 341)
(3/2, 1/2) 4 (1/2) 22 (1/2)
12 (CAN) 10 2 2 (D) 10 14 17 17 17 17 17 17 17 17 17 17 17 17 17

Var (8) 2 Mu Var (XI) Var (X1) 2 E(X2) -02/12 => Var(8) 202/34 Qx(n)2 = MH 8 = M+282 Bias = E(0) -0 = -0/41 MSE(B) = Var(B) + Bias 2 2 3 + 102 = MSE(B) 2 Var(B) + Bias = n02 = 202 (n+1)(n+2) $S^{2}z = \frac{1}{n-1} \sum (X_{i} - \bar{X})^{2} = \frac{1}{n-1} (\sum X_{i}^{2} - n \bar{X}^{2})$ 057) Var (XI) = E(XI) - [E(XI)]2 E[X2] 2 62+, 42. E(x2) = Var(x)+ [E(x)]2 Var (x) 2 62/4 m-1 E(s2) = m-1 62.762 MSE(ô) 2 Var(ô) + Bias2(ô) Bios (62) = E(62) -62 = MSE(62) = (2n-1)64/42 MSE(62) < MSE(S2) P2 eZ(Xi-X)2 P2 e(u-1) S2 Var(P) 2 2e2(u-1)64 E[P] 2 Be(n-1)62 Bins (P) 2 62 [p(n-1)-1] MSE (P) = 202 (2-2) 64 (1+2e-2ne-e2+ n2e2) f(l) 2 64 (1+2e-2ul & -e2+u2(2) P'(e) = 0 => ez 1/4+1 P"(e) z 26"(42-1)>0 C2 1/4+1

Q60) lib(τ) 2 $\frac{1}{4}$ $e^{-\frac{\chi_{1}}{4} - \frac{\chi_{2}}{4}}$ $l(\tau)$ 2 $\frac{1}{4}$ $u(\tau)$ $v - \pm 2\pi i$
P(T) 2 N/u(T) 0 - + Zxi
l'(T) 2 - "/T + 1/T I Xi
e'(T) 2 0 => T= \ ∑ Ni
TZ XZX; ZX
7.51
F=(n) = f=(n·n) f=(n) = u. Th(n) · (u.n) = the
Fx(n) 2 fs(n·n) fx(x) z u. Tufr(n) · (u.n)u-) e-Tun 2 (uT)u xu-1 e-(ur)n x ~ [(u, 1/r))
T(u)
E(x,) 2 T Var(x,) 2 T2
((x-T)/T) ~ ~ N(O,1)
エマルノー アン
$\overline{X} \approx N(T, T'/u)$
E(X) 2T Var(X) 2 hzu Var(X1) 2 h Var(X1) 2 T/n
$I(\tau) = 1/\tau^2 \Rightarrow \ln I(\tau) = \tau/n$
$\chi \approx N(\tau, \tau_{\lambda})$
Then Interval => [x/10+2414/54 > x/1-2012/54]
X~T(u,=) P(x, wr(1-a/2) ≤x ≤x, wr(a/2))=1-a,
[Yu, Wr (1-0/2), Yunr (d/2)]
068) Tz Zxi P(xzk)z 2k/kl·ēn
fx1T(21t)2 t!
χ_{1} $ \cdot, \cdot, \cdot\rangle$ $ \cdot, \cdot\rangle$
fx1x1(x1k) z 2 22++ 24 e-2(n-1)
22! · ' Kn [
$f(\chi_1,,\chi_n \lambda) = \chi^{T}(\chi_1,,\chi_n) e^{i\chi_1} \cdot \chi_1^{T} \cdot \dots \cdot \chi_n^{T}$
070) f(x,,, xu10) 2 g(T(x,,, xu),0). h(x,,, xu)
/ f(21), 2 e-32
> = 30 (x++xu)
Tz Z Xi -> is sufficient.
122 / 1 / 18 suffice.
073) f(x10) = 402. e-2/202 f(xxx)= 200
073) $f(x 0) = \frac{y}{2} e^{-\frac{x^2}{20^2}} + \frac{f(x 0) - \frac{x}{20^2}}{f(x 0) = e^{-\frac{x}{20^2} \cdot x^2} - 2\ln 0 + \ln x}$
$\frac{1}{\sqrt{1-\sqrt{2}}} = \frac{1}{\sqrt{2}} = \frac{1}{\sqrt{2}}$
T2 ZX2 is sufficient.