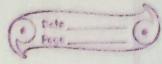
ASSIMINMENT SOLUTION - STATISTICS	MAJOR
adt and 1	do
Example -1 , $N = 19$	History
Median \Rightarrow $\frac{n+1}{2}$ \Rightarrow $\frac{19+1}{2}$ \Rightarrow $\frac{20}{2}$	= 10
So, the Median is the 10th value that is	
Example - 2,	
Mean $(\bar{x}) = 45 + 39 + 53 + 45 + 43 + 48 + 50 + 8$	45
$\frac{\Rightarrow}{8} = 46$	
So, the Mean (x) is 46.	
Example -3, Total Monthly Salary of workers = ?	
Example -3, Total Monthly Salary of workers = ? NO. of workers = 10 Mean = 1445	
Mean = Total Salaries	
No. of workers	



1445 - Total Salaries Total salaries = 14450 \ After Joining of New worker Total Salaries => 14450 + 1500 = 15950No. of workers => 10 + 1 = 11Mean => ? Mean = Total Salaries No. of workers 1450 1 081 = So the Mean of 111 worker's Monthly salary is 1450 150 T A

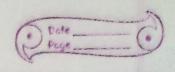
1

3 3bott

dus 1100

Date	-
Page	 >
1	 10.00

Examp	e-4,	analai let	
		0.00	
	Height	No. of girls	
	0	Z 024H1	150
	120 - 130	4	$f_0 = 12$
	130-140		1 and f, = 29 mg
	140-150	12 = fo	$f_2 = 8$
L=	150-160	00120=fil	1 = 12 10 to 1
	160-170	8 = f2	E markay to all
		50	Mean = 1
	· Mo	ode = Li	$f_{1} - f_{0}$ $2f_{1} - f_{0} - f_{2}$
,	MALONY	ou po on	$2f_1 - f_0 - f_2$
<u>, </u>	08	= 15	$0 + 20 - 12$ $\times 10$ $\times 10$ $\times 10$
-		- 11	$(2\times20) - 12 - 8$
		0.5	
.	01	= 150	
	diast 2	111 mosken	
·	68	= 15	
,		= 15	0 + 8 × 10
+			
	- ο Υ	-	150 80
-	08	_	150 + 4
-			
-	07 .,	2	154
			N 0
	50	the Mode	US 154



Example - 5,

Range = 13.67 Largest value = 70.08 Smallest value = 9

Smallest value = Lågest value - Range

= 70.08 + 13.67 = 56.41

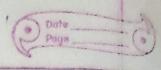
So, the smallest value of the rang is 56.41

Example - 6,

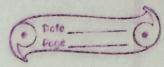
Mean => 11.4 + 12.5 + 12.8 + 16.3 + 17.8 + 19.2

(=> -90) = = 15000 < 30) 9

	52	1 - 0.40	4	
34,	di= 24 - 20	d.2	1	
	= 21-15	8465-0	(=	
11.4	-3.6	12.96		
12.5	- 2.5	6-25		
12.8	-2.2	-4.84		
16.3	1.3	1-69		
17.8	2.8	7.84		
19.2	4.2	17.64		
		- 12		
1		Ed: = 51.22		



				Date Page
	Standa	1d Deviation	$(\overline{\sigma}) = \sqrt{\Sigma}$	di ²
		90.03	51.22	ani 2
	1 500 - 500 Mar - Maria	ov topic l	= \ \ \ \ 8.53	3
V.	ty.21	Hence o	= 2.9	
vya.		= 56.9h		
Examp	le-t,	Normal distrib	oution = Z =	500-524
			=	0.24107
	h = 527		to Natt Za ma	1 - olem
\$ S. P.	0 = 112	3 > 500) = P (1 - olem
	0 = 112	12.5 + 12.8 + 16 3 > 500) = P (27-24)	1 - olem
2. [2	0 = 112	12.5 + 12.8 + 16	27-24)	1 - olem
	P(x	1 - 0.405	27-24) 52	M Selent
	P(x	1 - 0.405 0.5948	27-24) 52 8-18-18	10-11 10-11
2. [3	P(x	1 - 0.405 0.5948	27-24) 52 5-15=jb 21-35= 3-8- 3-8-	12.5 12.8



Example-8, X = Random Vasiable u = Mean S = Stand. deviation. ll = 266 Days S = 16 Days X, = 240 Days; X2 = 270 Days Z, = X, -11 _ 240 - 266 16 1-1.625 _ -1.63 Z2 = X2-11 10270-266 201100.25 of dignores 2.0 = (8)A)9, 9=(8) 0,6 $P(z, \langle z \langle z_2 \rangle = P(z_2) - P(z_1)$ P(-1.63) = 0.5155 P(0.25) = 0.59871- 0x 100 = 0.0 (P(Z,(Z(Z2) = 0.59871 - 0.05155 = 0.54716 Hence 1= 1/9

Date Page

Example -9, 10, 50, 30, 20, 10, 20, 70, 30

- (1) Minimum = 10
- (2) 1st quatile = 17.5
- (3) Median = 25
- (4) 3rd quartile = 35.
- (5) Maximum = 70

Example-10, Given P(A) = 0.4

P(B) = P, P(A1B) = 0.6

So, P(ANB) = P(A). P(B)

P(AUB) = P(A) + P(B) - P(ANB)

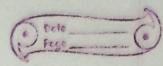
=) 0.6 = 0.4 xp - 6000 pb P(A). P(B)

0.6 = 0.4xP - 0.4xP

0.2 = 0.6xP. (120)

P = 0.2/0.6 = 1/3

Hence P = 1/3



Example-11, Let A = Passing the 1st test & B = Passing the End test P(BIA) = IN P(BNA)
P(A) P(B|A) = 0.16 0.8P(B/A) = 0.75

Slomoconde

A to 1

Andependent = 8 Example -14 Example-13, P(Selecting Any Number) = 100 Poselecting 9 from 1st bin = 0.1 x0.1 x0.1 1 from 2nd bin & = 1 from 3rd bin = 0.001 Thank you Example-12, Let A = First die is 5 Leb B = total of 2 dice is greaterthan qPossible outcomes for A And B: {(5,5), (5,6)}

