	Exercise - 11.	1	1, 11		1 11	1 P. D. S.	
1.	Calculate the	grantile de	viation	andi	ts coef	ficient	- grow
	the following d	ata.			1 1		
		5.67	)	8 X S S		74.00	
a٠		20-30 30-40				40-80	
	No. ob students	13-41 12	16	16 SN	8	6	
	Solution			-	(-/3ft =	5.00	
	Marks (2)	frequency(f)	c.f	. 4 1	5 3 L		
	20-30	4	ч				
	30-40	12	16				
	40-50	016 53	32	-1 52	8 /		
	50-60	10	42		17		
	60-70	8	50				
	70-80	6	56		,	wid	
		Ne 56	(P.P)	Oil ival	2 stiles	1 D	
	Now,	1. T. V.					
	91 = N	2 56 =	14				
	Y	P 2					
(1)	C. f greater	than 14 is	16. 9	50, 9,	ies in	the	class
	(30-40)	88 2.01 :			1001	À.	
	Using for	nula P-E	1	0 10	tribild		
	8) 2 L +	V - C.t	0		75. Sa		
	)	15 E E E . 8 D -	×				
		8888 F 38 1 0.	)				
	50 12 36	+ 56 - 4	- <del>Q</del>				
		4.	× 10				
(	. of of-cd od-	02 120 M	E 06-	25	1	14 xx 4	3
	N = 30	+ 10 ~10	3	£ 1 /	it ite	10 :04:	
		1.2 7			10.	o for In	
	2 26	.3333			41"		
				1 the said	- 10 Ka 18117		u,

					1.11	- 280 8		
9	Again,		1	1:1	7 //	3/2/4)	100 1	
1 1	ton 93 . 3	5N 001	117 10	21/1 (2014	Labor	12/21/12	2-11-	
					No.			
	2 3	X.56	= 42		63	2100	M 1.13	
	Us of saf-one sol	M 00-0		1 200	1/01	1.	31/1	
	C. F = 42	, 50 13	- lies it	1 150-	60) cl	ASS VV	1.0	
	we know					- 1007 Feb	4	
	93 · L	7 3N	- CF	200010	5 1	(5)-100	211	
		N.		XI		08-0	8 2	
		31	f	12		014-0	E	
) -	= 50	+ 42	- 32	210		05-01	M.	
		1 1 2 3	lo	1		00-00	2.	
	2 6	- 60		2		01-00	)	
	Now	)	5	1 0		03-01		
	guartile deviat	tion (q.	0) < 9	3-91	1			
			<i>V</i>	2		, 000	D)	
			11/2 6	0 - 38	.3333	· (2)		
				1 2	P.	-		
1	(1)		1 2 5	1111	1 44	8 <del>333</del> 5	91.11	<b>^</b> 1
PAR I	Álso,			10.83		,5,,,	21.00	<u>-</u>
	Cockticient of	Λ.Λ. *				- 36/		
	COCOLICION UD	عرب د	93-	0,	Lucusol-	OH. J		
					1	1 1 12		
		4		38.333			I T	
						- 4		
		1	0.30	36 0-7	358	0-220	3	
1		() [	<i>/.</i>					
b.	Marks	20-30	30-40	40-50	50-60	60-30	70-80	
	No. of students	3	5	G	8 36	- 4	4	
	Solution:				2.1			
				5.83	20.20			

marks(2)	No. ob stas (F)	c.f		1.15	in the
20-30	3	3	-2		
30-40	5	8		51.11	3"
40-50	6	14		1026	
50-60	8	22	. J. 12 10 hori	771000	
60-70	4	208 26		2	
70-80	4	30	.5	1	
-	Nz 30	G1-125 3 2			
Now		0.22101			lt.
For. 91	c N z	30 2 7	.5		
03-36 3	15-26 M 35-31		ol- e water to	wallow	3
C.f a	reader than	7.5/15	811 So, 9, lies in	(30-46) c	1955.
.1. 6		N - C. F		: mail 1 2	
	7.	4		1 do sonotad	
	1 /4	£	N	11-2	
	· 30	+ 7.5 - 3	5/2 10	21-01	
1 A	3.8	5	31	09-21	
	2 30	)	-)	2.5 8.2	
Agaib	- Ja		57	175-3	
	2 310 2	3236 2	22.5		
	4	4	7 1 0 M 3 2 11	(5) (6)	
C. C	just aread	or than 2	2.5 is 26.50, 0	a lire in	class
 (60-70).	3057 3700		Hard colores to		C1935
 • •	93 2 L.	4	14		
		2	- XI		
		· ·	· · · · · · · · · · · · · · · · · · ·		
	2 60	+ 22.5-	22 × 16		
			Spl.		
	26	1.25	2.5		
we kno	w,			10	
(	3.D ~ 93	-91	VY'S	2	
		2	17		

					1.1172	h 31/1	CACALONIA	
L	61.25 - 39			1.1.0	13, 1000	10.11	20-30	1
	2	b					014-03	-
7	11.125					3	02-014	1
	Also,	101		M			63-03	1
	Coefficient ob	g.	b . g.	3 - 91	- 6	,	.6-1	-
		V	93	+91		/	108 - 0 - F	-
			- 6	1.25	35	1.6		-
		3.13	C	1.25 +3	39	3 1/1		
			e	0.2219			~017	
				5 10 (*:			A TRUIT	_
c.	Volume of wa	dis	5-10	10-15	15-20	20-25	25-30	
3.27	No of familie		3 48	12	406	600	2	
	Solution:			1.5 - V	1.	1 10		
	Volume ob water (2)	٨	so- of far	rilics (f)	, с	· t		
	5-10		4		4			
	10-15	Ó	1 12 €	- 3-6	7.6	3-		
	15-20		16		32			
	20-25		G		38			
	25-30	2	2		40			
			N = 40	0.2 / 0	1 47 5	.3	2	
	For Q1 = N	ر ر	10 2 10	1	1-7			
225	W 211 80 0	26	4.	mille.	1	Low	1.1	
5674	C.f just grea	Jur	than lo	15 16.	So 0,	lice	in class (10	( کا - د
	2.9, L						· II C [905 C -	
			Ч			A		
			f	-X				
	2 10	1	10 - 4	V \$ 5				
		- 1	12	X	4.0			
	2	12.5			1.0			
	Also,	12,2		- 2 \				
	11. (3.)					7 5	7 7 7 7	
	932 310			1.2	5 8 8.	$(T \cdot p)$		
								_

1	3× 40		3-4 101 4 -1 03	
	4			
1	36			
	C. F greater than	30 15 32	. 50, 93 lics in class (15-20)	
	- 93 · L + 31	v - cf		
	1/3 11/11/11	N X	16/ 111/ 11/10/10 7.3	
		F	(01-3)	
	e 15 f	30-16	25 1 6 1 3 1 7 1	
		16		
	2 13.	375		
	Here,		- FI For 2	
	g.D = 93-9		3 7,	
	2		251-8	
	2 19.	375 - 12.5	1 1 1 1 1 1 1	
		200	Exes : 48 - 89	
	z 3.V			
fat ?	Coefficient o	15/60, 50,	E. C. F. grade star Man 82.5	
	Coefficient o	6 9.D 2 9	3-91	
			33791	
		. 2	19.375 - 12.5	
		5 . NO . 2	19.375 + 12.5	
		2 · 2	0-2150-0.216	
			C 57 1 6 1	
<u>d</u> .	Age (years)	-5 5-10	10-15 15-20 20-25	. <del></del>
	No. of person	5 200	15 20 , 10	
	Solution:	5	2	
	Age (2) No. of 1	insonly (.f		
	0-5	118 85	2 19 1 200 6 40 101 st 100	
	5-10 20	25	€ E	
	10-15	- 40		
	15-20 20	Co		

=

			1	T		AN X3	1
	20-25	10	70	-			
	4 D 9	N=70			1	0.5	
					- 1/	1./	
(05	for, 91	E N ?	70-2	13.5	15 110	1 3 2	
	L. F.		4	77	NA P	lies in class	
	C. F a	reater that	n 17.5	15 2	<u>s. so, 9</u>	, lies in clas	2
	(5-10	)			, , ,		
	.'- 91	= L f	N-Ct	31	J. 4 61		
			4	_xi	1		-
			f		5 ( E - C		
		= 5+	7.5 - 5	x 5		DC1	
			20	17 1	100 8	20 = ([.0)	
		- 8-1	25		7.		-
	Also,			12:51	12.33.		13/
	93	2 3N	2 3×70	z s	2.5		
		4	4		BR311.8		
	C.f or	reader than	52.5	5 60	50, 93	lies in class (	15-20)
		. 93 L L	+ 3N	- (.t	7.0 do /	1071200	
		6	18675				
		251-	216.61	F			
		7.61+	15 + 52.	5 - 40	5 5		
			0-2156		X		
4,	1-4-1-1	2	18.125				
	here,	5-20 1 25-2	1015	ا ا	2-0	Aug (trasi)	
	,	3.D. 93-	91 4	8.125	- 8.125		
		2			2	1/11/11/25	
	Also			4.3/	5 - 2 3 13 1	1 ISTA	
		nd ok 9.2	6 02 - 9	1 2	18.125 -8		1
				5 5	18.125 }	8.125	
				0,6/	2 0.381	- ) - y /	
					J J A L		

MIL						Lage:	
e.	Agelyss)	60-65	65-70	70-75	75-80	80-85	85-90
	No. of stds	7	5	8	4	3	3
	Solution:				\$		
	Age (2)	No. ob	3772 (t)	1 C·	80		
	60-65	7		5 7			
	65-70	5		1/2	7 -		
	7-0-75	8		20		Also	
	75-80	194	20 0F	124	10/1	1000	
	80-85	3	(a)	27			
	85-90	3	86 "	30			
		N 2 3	86				
	for 9, 2	N 2 30	2 7	۰.5			
					1927 1 124		
11 5	C.f great	fer than 7.	5115 11	21.50,0	Pilles	in class	(65-70)
į	1. 9,12	LHN	- Cf	8 81	01	,	1
				×i		1 10.601	
			1.0			У.	
		2 65+7.	5-7	X 5	9	3 -	N
			5		0	51	8
		65.5	P'	£ .	8.1	31-3	
	Also,		}.	0	3.6	01-	
	for 93	2 3N L	3X 30	L 22	5 21	113	2
		٦	4	C.	7	88-1	7
	1. 93		greater	Than	22.5 15	24.5	0, 92 lies
	in class	(75-80).	F	a.)	, j	36	i.
	: 93	· L +31	- C.t			OF S	
			-	~i	SHAN		
	1		<i>+</i>	411	v.	5 10 1	
		7 75 7	22.5 -	20 x	5		
			4	19 22 3			
		· 78.1	25				

	11. 11.											
	ne	n 03	00 36	F40	€ 0€	2-)	2.)	10		( 95%	Agi L	
25	1 12	,	93-	9,	2	2		4		ohle.	do out	
			,	2.						1/10	Gulas.	
	11	10	2 78	. 125 -	65.5	1163	do	1111	A	(8)	18A	
			1	2			-		2 1	3	1-03	
			~ (	6.31			2			0 (	-33	
		Also,		5.6			3			56	0 6	
				9.1	D. 308	93	191		25	1 03	36	
				FF			79			28	03	
				0 8	2	.7-8.	125	<u>,</u> 6	<u>5·5</u>	00	58	
	78.125 7 65.5											
	12.6.20.09									10 f		
									1/_			
F.	x	4-8	8-12	12 -16	16-20	20-	24/	24-2	8 0	28-32	32-36	36-40
-	f	G	10	١8	30	15	11	12	1	16	6	5
	Solu	Hion:			13/		N					
	2		f		c.	f						
	4-		G		G	- 2	(B	160	y r			
	8 -		10		16	2						
	12	-16	18		34		2	65,	3 5			
	16	- 20	3 6		64						1	
	20	-24	15	13. 7 6	79	× 8	A	ME	3-	5 P X.		
		-28	12		(د	7		1-1				
211	28	-32	10.	1 22	1101	690	1.0	- 4				
		-36	6		107			20	(F)	2001	) 1	
	36	-40	5		112	3-4	VIE	- 1	.1	2 (1)	,	
			Nell	2	1 /		1.1	, d				
	For	91	2 N	L	112	+			40			
			Ч	3 ,	4 -	20.5	1	7.6	3			
				2 7	a 28	1. 4.						
	• • • • • • • • • • • • • • • • • • • •											

	Date:  Page:	
#	CC mules Han 20 is 24 so dies in Class [12-16	)
$\parallel$	Cf greater than 28 is 34. So, go lies in class [12-16] Sq 9, z L + N - Cf	
#		
$\parallel$	Train for the for the for the for the form of already	3
1	2 12 + 28-16 x 4	
	18	
	= 14.667 /2/ banduks to out ( -) -1-01	
	Also, & OE miles	
	93 2 3N 2 3X112 2 84	
	731	
	C.f. greader than 84 is 91. So, 93 lies in class (2	4-28
	2-93- LJ JN - CF	
	85 Xi 5/20/06	
	* 3.5 = V7	
	- 24 + 84 - 75 x 4	
	12 F 8 8 S W 8 12	
	2 25.667	,
T-	(s) Mercy missil a or and in the obvious for it	
	9.7. 93-91 2 75.667-14.667	
	2	-
	25.499	
_	Also,	
	Coefficient de 9.10 25.667 - 14.667	
-	25.667,7,14.667	
-	e 0·272	
_	13 3 03 X 5 8 VE 8 5 6 6	
1		
	DI OF I CAPITAL COLF ED ON EX ALL MONTH WAS ALL	

	11							
2.	Calculate que bollowing data	sazfile de	viation	and	its c	ocffice	cut from	n the
	Following Late			1)	VIE	] =	12 43	
	Bollowing Barre				14			
a٠	marks	less Han 30	30-40	40-50	50-60	60-70	70 above	
	No. of students	3	G	9	1	3	2	
	Solution.			1 3 l				
	Marks (2)	No. of	studen	(t) f	rade.	f		
	less Than 30	1	3		3		ALSO.	
	30-40	4	6	211 545	9	18 1	. (1)	
	40-50		9	14	18			
2-115	50-G0	500 000	5/0	1 // 2	23	1	1.5	
	60-70		3 1 1)		26		5	
	70 above		2	77	28			i
		1029	z 28	+				
	here.		0.5	-M7 4	11 5 A			
	912 N	2 2 8 2	7 1	1				
	4	4			5 5			-
	C.f just as	cater than	7 15	9. 50	6. li	! .	classica	١-١٨٥)
	C.f just 92	11) + N	100-CE	3"	10 - 20	2 11	CIASS 13	8 410)
		5	1		7			
			fw. a	- X				
	2	30 + 7	-3,	. 10			1.4	
					0 .6	1	1	
		2 36.66			*/	610014	6 10 1	<del></del>
	Again,	1	6.23	9				
	932 3N	2 3 X Z	8 2	2)				
	. 4	4					· · · · · · · · · · · · · · · · · · ·	
	C. f greate	r than 2	1 15	13.50	02 1:			-1
	C. f. greade	L & 3	N ~ C	c C	<u> </u>	S IN C	1955 136-	601
			ч	_ \ \				
			f	X 1				

						0		
2	50	21-18.	10	- 1/-	2 -	2F.2_	LON	
		5	X			3		
1	56					e e	2.11.	3
	Agadn		A					
	ં લ	·D · 93-9	1 34 6.5 4	F 7 '-		V15 + E	p vot	
		2				N		
(a)	· of	1 56-	36.667	20028	9 11/6	46.300	2.0	
		2					101	
		2 9.60	65	() . 4	+ + 1	2 2 0		
	4	150,			li Operation of the second			
		bbicient ob	Q.D 2 93-	- 61				
				+917117	60	0		
			٠ 56.	36.667				
				736.663	5H x			
			~ O	. 21			2011	
	L						<u> </u>	
Ь	7	less than 30	20-40 4	0-50 5	0-66	60-70	70 al	sore
	F	2	4	6 31	821	5 H 4	3	
	solu	ion:		*1 M	7			
	x		t	C. f	3163	0 =		
	1	than 30	2	2			a d	
		0-40	4	8 0 G	9 2 Ja	1 to 1017	107	
	40	0-50	6	12	1211			
coletta e	30	0-66	12. ( N & 317.	20				
	6	0-70	2.16 7 2910	24				1
	70	o above	3	027				
			N227		÷			
	Indo F	07, 91 2 N	1 27 2	6.75		8000 22	1 / .	
	1			1	1	er de l'	1 11 1 1 1 1 1	
		C. f greater	than 6.675	is 12.	50, g	lics in	class	(40.50)
		:. 9, 2 L	+ N-C.F	<u>;</u>				
								•

	+ b							
~	40 !	6.75 -	6 ~ 10			1 15	4 02	-
		6				₹		
e	41.2	25					93	
	100			14 Jack			and.	
	for	83 2 3N	2 3X2	7 . 20	0.25	.10,	112	
		4	٣			· .		-
	C. t	greater H	nan 20.	25 015	24. 50,	93/10	in class	60-7
	No	inj	4					!
	1	93 L L	+ 3h	-cf	2)))	Cr. P		
				i			5/1	
			1	10 10	7 (7.3)	a facility	1./	
		2	Go 7280	·25 - 20	×10			
				) = - ) ?	1			
			113.129	60.629	5			
	Her	• •	•	10.0	A-			-
		202 93-	<b>(</b> 0)			f )		,
2/2	D A E	2 113.1	25 - 41.29		25 26	andt -	2/ 35	d
	- 2	2 713-1-	2					
		2 9.6°	17<		7		moleclas	
	DI.		(%)				17 1	
		efficient ob	φ.p «	93-81	N	0.5.00	di sal	
				93791	)			
			4	60.625	-41.25		1 - 1	
			J-4	60.62	5 +41.25	Λ.		
			2	0.190	<b>€</b>		O NE F	
c.	2c	Below 25	25-30	30-35	35-40	40-45	45 above	
	f	5	12	22	25	17	2	
0 0 f.	Solu	tion:	,0- 5/	i Fa	1 grate r	Asses 7	)	
-	I					l,		

	_ x	c. f			
$\parallel$	below 25	5) 0	3 / Cal	13.1.50	
	25-30 12	10 617			
	below 25 5 25-30 12 30-35 22	39			
	35-40 25	64			
	40-45 17	181			
	us above 9	20			
2/10	Ne Do	18.22 37	wal set 1 16	n) maint	
	For 91 2 20	2 22.5	20 =	· · naching	
~	4 4			miles.	
	C-f greater than 22.5	14 39 . 5	o, g, lies ir	class (30	-35)
~ .	: 91 · L + N - C			ca wolve	
	7	17. 10		0.5	
	£	221		B 1	
	2 36 <del>)</del> 22.5	- 17 VS		DP1 26	
	2	2		111-11	
A	31.25	10		2/3 / 2 1 7	
	Again,	1 1 1	11/1		
	93 2 31 3X	90 2 67	5	B	
	4	4			-
	C.f greater than 6.	7.5 15 81.	So, ef 91	lics in Mo	-45)
	Class.	F. 91-83. 19	2 20/21 6	1) smittl	1.3
(*).	012.93 c L+ 3N			- Clary 2 1	
	4	xi		- 441/11	
	7.4	(4)(2)	2207	20000	
	= 40 + 63	7.5 -64	5		
	E1	17 ^	51	01 11	
	2 41.629	5	1	o -nb	1
	Here,	)	8	on ac	
	Q.D c 93-91	2 41.029	131.25 =	1-222 y.	89
	7	2			

Again,									
Coefficient of 9.D 2 93-91									
Coefficient	of 8.7	9379	1	5/		0.5	25-		
				25_		1 7 2 4	30-3		
		41.62	9 + 31.2	.5	1	0	1.54		
		F				2	H ->1-1		
		2 0.	<u> </u>			771.1	4 614		
	1 25		2./25	25-4	1	40-45	45 -al	sove	
Income (RS)	below see	1 1	, ,	15	W	17			
	5	12	PLL	1 6	N			-	
Solution:	Т		1	r //	T	/	1 . 5		
Income (2)	1 Pre	quency	A	.+	157	A SECTION OF	<u> </u>		
below 80025		5	5 - 5	1	1	1 10	22		
25-30		1		7	+				
36-35				39					
35-40	-			, the					
40-45	1:	7/	81		+				
45 above	9	,/	90	1. 2 . 6	5	, , l			
A	NZDY	<u> </u>	111		1_	· in	- Lyen		
Hure, 9,	2 N 7	20 = 7	22.5	1	<u>. S.</u>	3 7 ()			
	7	10	1.63.	15.11	( y	1-100			
To come (Rs)	below so	50-70	70-90	90-1	10	110-1430	130 150	150 9	
	5	12	72/	1	- 4	13	10	9	
			11						
	Fregu	an 67 (F)	c.f						
	5	N 2	1.5					Ā	
50-70	12		17					A	
70-96			35	3 A P	.3				
96-110	25		64						
110 - 130			81	. 23	A.	3 (T · 1)			
130-150	10	174	91						
	Income (RS) Frequency Solution: Income (2) below \$2525 25-30 36-35 35-40 40-45 45 above  Hure, 91  Income (RS) Frequency Solution: Income (RS) below 50 50-70 70-90 90-110	Income (RS) below \$5  Frequency 5  Solution:  Income (2) Frequency 5  25-30  36-35  25-30  10-45  45 above 9  Fure, 9, 2 N 2  Y  Income (RS) below so frequency 5  Solution:  Income (RS) Frequency 5  Solution:		1   1   2   2   2   3   3   3   3   3   3   3	1   1   2   2   2   2   2   2   2   2	1   1   1   2   2   2   2   2   2   2	2   11.029 - 31.25   11.029 + 31.25   12.0.135   13.25   12.0.13	11-029 - 31-25   11-025   13-155   13-155   12-125   13-125   12-125   13-125   13-125   13-125   12-125   13-125   12-125   13	

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	C.f greate	x than 25	5 35 . 5	50, 91	lies in class	(40-90)
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	Also			S C	males than Is	15 81.
	9323	3×100	2 75	<u></u>	greater than 75	
		, ) (	120	)	1	5
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		f	X	2.8	3.61 - 3.6	§ ·
		2 110 f 75	-64 , 2	6	202 - 201	
		11 31)	,	6.3	1 269 - 3.03	
		2 121-94)	,	5.0	3.6 € 5.6 €	
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3.	Calculate th	e quaeti	le devio	tion	and	its co	efficien)	From	1		
600 0	the given dada.	Signer C	9 21 2		11	olise.	1-0				
			1- 7	· V	4	5			7		
a.	Class interval	20-29	30-39	40	-49	So-59	60-69	70-25	$\prod$		
	Frequency 100 90		85		80	60	56				
	Solution:										
	Here, Cf c lower limit of 2nd class-to upper limit of 1st class										
			2	FV	FIE						
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118	is a fact who	1.3	7 . 00	128	F V	15 1	s 2		_		
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					-5				_		
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	9,2 L J	N-CF		_4	· · · · · · ·				_		
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		<u> </u>					34	_	_		
	2 25.	5 + 116		×10	15	freds 3	100		/		
		16	၁၀								

		Page:							
c		31.30							
	10	Again, Is the organism of the land some of some							
		9323N 23XH2529465							
		Y Y							
		2 8 <del>7.1875</del> 348.75							
		C. f greater than 348.75 is 355 - 50, 92 lies in c	ass	٤					
		(49.5 - 59.5). (10000) (1000)							
		:-932 L/4 3N -Cf							
		11 Y Evi 2.62 - 5.61							
		f 8 f 8 -5.03							
		2 49.5 + 348.75 - 275 × 10							
		88 (80 33 38)	<i></i>						
		e 58.71							
		Mere							
		9.D = 93-91	1,00	_					
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ë S		(d) 1/2 11 2158.71-31.30 1 25.8 11 (d) (d)		_					
		2 17 - V1 6 1 3 . P.							
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	4	Also		_					
	-	Coefficient ob 9.0 2 93-918		_					
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	58·71-31·30 58·71 + 31·30								
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	L	dass Interval 10-19 20-29 30-39 40-49 50-6	9						
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	Solution:		1.	· 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
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	- 20-19									
	2									
1		118 20 0 E BM	5-6-16	Maria Contraction						
	class Interval	frequency	C.f	C 2 - 2 - 641						
	2.5 - 19.5	<b>M</b> )	4	* 2 72						
	19.5 - 29.5	7	11							
	29.5 - 39.5	8	19							
	39.5 - 45.5	F 15 15 1	24							
	49.5 - 69.5	9	33							
		N=33	. 9 3 9 1							
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	:. g, L }	V - Ct	2							
	J- E	ч .	16.5100							
		F								
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		ा हो ने व								
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	932 3N 2 3×33 e 24.75. Cif greater 24.75 is									
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ė,	33- So, 93 lie	s in class lu	19.5 - 69.5	) / -						
	2 93 2 1	- + 3N ~ C.f	1	9						
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		F								

•	45.5 t.24	.75 - 24 ×10	2 6 9 6	7 1 1 1 2 34	-1/_ fi						
	M. L. P.	<b>9</b> )	I I	A.							
2	50.33	31/ 18 Jack	98 (4) 21	Ball whore	22						
	nene,		110 - V	6 3 3 12.							
	g.D 2	93-91	The second								
		2	HA A To								
		2 50.33 - 75.	571-111	2.8.5 1							
	2										
	× 12-38										
	Again,		- Lie	10	of A.						
	011	Coefficient	of 9p 2 51	1.33-25.57	2)						
			M May 1	50.33 } 25.57							
		( e = 3)	201/2 210	.3262	.52						
				6 7							
c.	Marks	1-9 10-19 20-29	30-39 40-	1000	5 70-70 86-85 90-20						
	No. of Stylents	4 8	10 5	6 8	16 1 5						
Solution:											
	Herez CF	2 10-9 2	0.5								
		2	2	5 6 3							
	Marks	No ob students	C. F	2 2 2	ax il						
	-0.5 - 9.5	1	2								
	9.5 - 19.5	4	2.55 - 2.3	F all							
	19.5 -29.5	8	13								
d	79.5 - 39.5	lo	23 -11	_5							
4	39.5 - 49.5	5	28		IA						
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	59.5 - 69.5	8	42								
	69.5 - 79.5	16	52								
	7-9.5 -89.5	7	59								
	89.5-99.5	5	64								
		NECH									
				and the same and t	<u>1</u>						

-	ALL STREET STREET STREET
-	Mere, 9, 2 N 2 64 2 16
	Cf greater than 16 is 23. So, 91-lies in class (29.5-39.5)
-	Q1 2 L & N - Cf
	91 L L 3 0V - C)
1	F
	2 29.5 + 16 - 13 × 16
	10
	2 32.5
	Alson
	93 = 3N 2 3x64 2 48 · C.f greater than 48 is
	18.521 88.06 4 1
	52. So, 93 lies in class (69.5 - 79.5)
	· 93 z L + 3N - C.f
	C. It be 10 -10 -10 -10 -10 -10 -10 -10 -10 -10
	01 8 1 2 FOI B N 1 Jadole Jani
	2 69.5 + 48-42 x16
	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -
	2 75.5
	Merry 9.D c 93-90
	2
	2 75.5 - 32.5
	2 21
	2 21.5 6 5
	Also,
	Coefficient of Q.De 75.5-32.5
	75.5 + 32.5
	-0.398

...

								Zvave: Page:		
d.	2	5-7	18-1	0	11-13	14-16	112-12	20-22		
	I f	14	24	3	38	20	(4)	8		
	Solution:									
	here,	Cf ()	lawer 1	mit	of sur	class - U	per limit	- ok 15} c	)ass	
	2 88-7 38-18 1 251 1									
		7	0.5	-		24 V - N	1		4	
	2				<u> </u>		· t	Manke		
	4.5-7.5				14	14	£ 2 -	7.0		
	7.5-10.5				24	38				
-	10.5				38	76	N2/ 1			
		-16.5			20	96				
	16.5-19.5				9 25 100s					
	19.5	- <del>21-1-</del> 2	2.5	) A	8	108	1	L. ricy.	1	
				N	= 108	1 . 12	20 1 600	Hibrara		
	For	for 9, 2 N 2 108 2 27								
	C. £	areades	than				1 1ics in	clas (1.	( ء ام د	
		6,	1 + 1	V -	COE 9-10	, , ,	1 (102 )1	clas (7.5	7 16.5	
		- 1	5 5 5 1	4			*		1	
					<del>f</del>	<del>( )</del>				
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		ain,					1	112)		
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			4					· 7 /400 30 5	1	
		2 9	<u> </u>							
$-\parallel$										

Date:	 
Page:	 

c.f. greader than 81 is 96. So, 93 lies in Class 14.25 Merc Q3 A 91 14.25 - 9.125 102

= 2.5625

Again,
Coefficient of 9D = 93-91 1

2 14.25 - 9.125

2 0.21925