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PASIÓN POR EDUCAR

Grado: 5TO CUATRIMESTRE

Grupo: UNICO

ALIAN FRANCISCO GAI EROS MORAES.

RAZAO

100	81	66	38	49	72	45	31
100	92	83	45	67	86	60	89
90	100	98	69	77	88	66	90
86	98	88	65	88	94	68	93
100	49	80	92	92	38	78	94
78	86	84	78	100	47	87	50
38	62	91	67	49	65	97	45
97	77	100	45	66	74	100	60

(9 INTERVALOS)

$$\frac{(NO\ MAIOR - NO\ MEIOR) + I}{NO\ INTERVALOS}$$

$$\frac{(100 - 31) + 7}{7} = \underline{\underline{10}}$$

$$\sum f_i \bar{x}_i = 4552$$

$$\sum f_i \bar{x}_i^2 = 352536$$

INTERVALOS.	f _i	% f _i	F ₁₀	% F ₁₀	\bar{x}_i	f _i \bar{x}_i	\bar{x}_i^2	
31 - 40	6	9.37	6	9.37	35.5	213	1260.25	7561.5
41 - 50	77	77.78	77	26.66	45.5	500.5	2070.25	22772.75
51 - 60	4	6.25	21	32.81	55.5	222	3080.25	12321
61 - 70	8	12.5	29	45.31	65.5	524	4290.25	34322
71 - 80	8	12.5	37	57.81	75.5	604	5700.25	45602
81 - 90	9	14.06	46	71.87	85.5	769.5	7310.25	65792.25
91 - 100	18	28.12	64	100	95.5	1719	9120.25	764164.5
	<u>64</u>					<u>4552</u>		<u>352536</u>

MEDIA =

$$\frac{\sum f_i \bar{x}_i}{n}$$

$$\frac{4552}{64} = \underline{\underline{71.125}}$$

$$\text{Mediana} = \frac{L_1 + \frac{n}{2} - F_{10} - 1}{f_i} \cdot a_i$$

$$\frac{n}{2} = \frac{64}{2} = 32 \quad \frac{71 + 32 - 29 - 1}{8} \cdot 9 = \underline{\underline{74.375}}$$

$$\text{Moda} = \frac{L_1 + f_i - f_{i-1}}{(f_i - f_{i-1}) + (f_i - f_{i+1})} \cdot a_i$$

$$\frac{91 + 18 - 9}{(18 - 9) + (18 - 0)} \cdot 9 = \underline{\underline{128.69}}$$

$$s = \underline{\underline{27.37}}$$

ALAN FRANCISCO GALLIGOS MORALES.

$$\frac{(90 - 47) + 7}{5} = 10$$

90	47	71	79	77	44
45	56	79	42	68	45
70	47	75	47	63	54
78	42	66	45	64	58
55	56	73	56	42	64
45	67	79	49	90	45
90	87	80	85	90	84

(5 INTERVALOS)

INTERVALOS	f _i	%f _i	F _{i0}	F _{i0} %	\bar{x}_i	f _i \bar{x}_i	\bar{x}_i^2	f _i \bar{x}_i^2
41-50	13	30.95%	13	30.95%	45.5	591.5	2,070.25	26,913.25
51-60	7	16.66%	20	47.61%	55.5	388.5	3,080.25	27,561.75
61-70	6	14.28%	26	61.90%	65.5	395	4,290.25	25,741.5
71-80	9	27.42%	35	83.33%	76.5	679.5	3,700.25	57,302.25
81-90	7	16.66%	42	100%	85.5	598.5	7,310.25	57,171.75
	<u>43</u>					<u>2,653</u>	<u>22,451.25</u>	<u>777694.5</u>

$$\bar{x} = \frac{\sum f_i \bar{x}_i}{n} = \frac{2,653}{42} = 63.76$$

$$\sqrt{222.27} = 14.90$$

$$Me = \frac{L_i + \frac{n}{2} - F_{i-1}}{f_i} - 1 \cdot 0$$

$$Me = \frac{26 + 21 - 20}{16} \cdot 9 = 27.5$$

$$s^2 = \frac{\sum f_i \bar{x}_i^2 - \frac{(\sum f_i \bar{x}_i)^2}{n}}{n-1}$$

$$s^2 = \frac{776,694.5 - \frac{(2,653)^2}{42}}{41} = 222.27$$

$$MO = \frac{L_i + f_i - F_i - 1}{(F_i + f_i - 1) + (F_i - F_{i+1})}$$

$$MO = \frac{47 + 13 - 0}{(13 - 0) + (13 - 1)} \cdot 9 = 47.75$$