CELAYA GONZÁLEZ DAVID ALEJANDRO No. LISTA 7 EXAMEN PRIMER PARCIAL

LIMITE CLASE	FRONTERAS CLASE	MARCA CLASE	FRECUENCIA	FRECUENCIA ACUMULADA	FRECUENCIA RELATIVA	FRECUENCIA ACUMULADA RELATIVA
12 - 19	11.5 - 19.5	(12+35)=15.5	4	4	0.057	0.057
20 - 27	19.5 - 27.5	23.5	14	18	0.266	0.257
28 - 35	27.5 - 35.5 (4)	31.5	12	30	0.171 (13)	0.429
36 - 43	35.5 - 43.5	(36+43)=39.5 (7)	10 (10)	40	0.143	0.571
44 - 51	43.5 - 51.5	47.5	9	49	0.129	0.700
52 - 59	51.5 - 59.5	55.5	8	57	0.114	0.814
60 - 67	59.5 - 67.5	(60+67.5)=63.5	10	67	0.143	0.947
68 - 75	67.5 - 75.5	71.5	3	70	0.043	1
			TOTAL 70		TOTAL 1	

20)

$$\bar{X} = \frac{1}{8}\sum_{i=1}^{n} x_i \Rightarrow \bar{X} = \frac{1}{8}(60+60+86+72+69+71+76+69)$$

$$\bar{X} = 70.38$$

21)

60, 60, 69, 69, 71, 72, 76, 86 138, 140, 158, 161, 168, 176, 180, 184

ECMO ES PAR

$1/8 = 4$

$\Rightarrow$

$\tilde{X} = (161+168)/2 = 164.5$

22

$V_{MAXIMO} - V_{MINIMO}$

$R = 184 - 138$

23)

$$S^2_{n-1} = \frac{1}{7}\left[(60-70.38)^2 + (60-70.38)^2 + (69-70.38)^2 + (69-70.38)^2 + (71-70.38)^2 + (72-70.38)^2 + (76-70.38)^2 + (86-70.38)^2\right]$$

$$S^2_{n-1} = 71.125$$

24 $\bar{x} = 163,175$

$$s^2_{n-1} = \frac{1}{7}\left[(138-163,175)^2 + (140-163,175)^2 + (158-163,175)^2 + (161-163,175)^2 + (168-169,175)^2 + (176-163,175)^2 + (180-163,175)^2 + (184-163,175)^2\right]$$

$s^2_{n-1} = 300,982$

$\Rightarrow$

$s_{n-1} = \sqrt{300,982} = 17,349$

25

$$m_3 = \frac{1}{8}\left[(138-163,175)^3 + (140-163,175)^3 + (158-163,175)^3 + (161-163,175)^3 + (168-163,175)^3 + (176-163,175)^3 + (180-163,175)^3 + (184-163,175)^3\right]$$

$m_3 = -1527,387$

$\Rightarrow$

$$\alpha_3 = \frac{-1527,387}{(17,349)^3} = -0,292 \Rightarrow \text{Sesgo negativo}$$

26)

$$m_4 = \frac{1}{8}\left[(60-70,38)^4 + (60-70,38)^4 + (69-70,38)^4 + (69-70,38)^4 + (71-70,38)^4 + (72-70,38)^4 + (76-70,38)^4 + (86-70,38)^4\right]$$

$m_4 = 10469,745$

$s_{n-1} = \sqrt{71,125} = 8,434$

$$\alpha_4 = \frac{10469,745}{(8,434)^4} = 2,069 \Rightarrow \text{PLATICURTICA}$$

27)

PESO

$CV = \frac{8.434}{70.38}$

$CV = 0.111$

LOS DATOS DEL PESO SON HOMOGENEOS.

ALTURA

$CV = \frac{17.349}{163.175}$

$CV = 0.106$

LOS DATOS DE LA ALTURA SON HOMOGENEOS.

28) Donde $A = (70.38)(163.175)$

$$COV(X,Y) = \frac{1}{8}[(60 \cdot 161 - A) + (60 \cdot 176 - A) + (86 \cdot 180 - A) + (72 \cdot 168 - A) + (69 \cdot 184 - A) + (71 \cdot 140 - A) + (76 \cdot 158 - A) + (69 \cdot 138 - A)]$$

$COV(X,Y) = 14.513$ => EXISTE UNA DEPENDENCIA DIRETA.

29)

$$r(X,Y) = \frac{14.513}{(8.434)(17.349)} = 0.099$$

EXISTE UNA DEPENDENCIA DEBIL.