

Gilary Garduño Alvarez

Asesor académico: Jorge Enrique Albores

Estadística Descriptiva

3er cuatrimestre

Grupo: "A"

Comitán de Domínguez Chiapas a 22 de Mayo

Datos	f_i	f_{ac}	M_c	$f_i \cdot M_c$	F_a	f_r
0-10	2	2	5	10	0.05	5%
10-20	7	9	15	105	0.175	17,5%
20-30	9	18	25	225	0.225	22,5%
30-40	17	35	35	595	0.425	42,5%
40-50	5	40	45	225	0.125	12,5%

$$n=40$$

$$\left| \frac{f_i}{n} \right| \quad \left| \frac{f_i \cdot 100}{n} \right|$$

Promedio (\bar{x})

$$\bar{x} = \frac{\sum M_c \cdot f_i}{n} = \frac{10 + 105 + 225 + 595 + 225}{40}$$

$$= \frac{1160}{40} = 29$$

Moda (M_o)

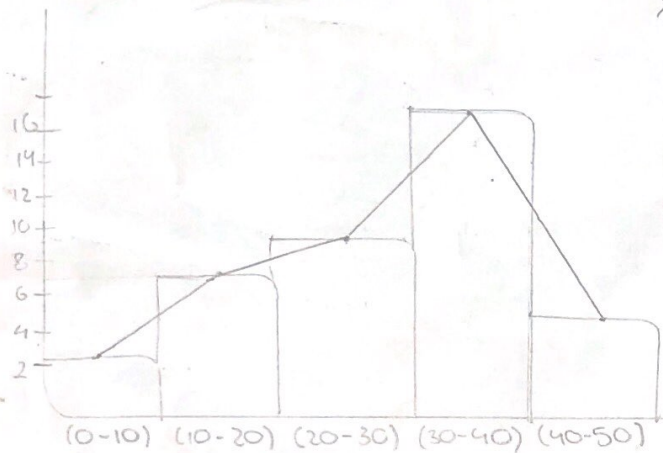
$$L_i + \left(\frac{f_i + 1}{(f_i + 1) + (f_{i+1} + 1)} \right) \cdot a_i$$

$$M_o = 30 + \left(\frac{5}{9+5} \right) \cdot 10 = 33,57$$

Mediana (M)

$$L_i + \left(\frac{\frac{n}{2} - (f_{ac} - 1)}{f_i} \right) \cdot a_i$$

$$M = 30 + \left(\frac{20 - 18}{17} \right) \cdot 10 = 31,17$$



Perceptil 70

$$P_{70} = \frac{n \cdot 70}{100} = \frac{40 \cdot 70}{100} = 28 \leq \text{fac}$$

$$= Li + \left(\frac{\frac{xn}{100} - (\text{fac} - 1)}{f_i} \right) \cdot ai$$

$$30 + \left(\frac{28 - 18}{17} \right) \cdot 10$$

$$P_{70} = 35,88$$

Tercer Cuartil

$$Q_3 = \frac{N \cdot 75}{100} = \frac{40 \cdot 75}{100} = 30 \leq \text{fac}$$

$$Q_3 = Li + \left(\frac{Q_3 - (\text{fac} - 1)}{f_i} \right) \cdot ai$$

$$30 + \left(\frac{30 - 18}{17} \right) \cdot 10$$

$$Q_3 = 37,05$$