Tabla de datos agrupados

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3e cuatrimestre

Actividad 1

Estadística

	Intervalos	X	f	F	Xi·fi	Fr	Fr	%
1	(0-4)	2	3	3	6	0.14	0.14	14%
2	[4-8)	6	5	8	30	0.23	0.38	23%
3	[8-12)	10	6	14	60	0.28	0.66	28%
4	[12-16)	14	4	18	56	0.19	0.85	19%
5	[16-20)	18	3	21	54	0.15	1	15%
	Total		21		206	1		100%

Media :

$$\bar{X} = \sum \frac{Xi \cdot fi}{N} = \frac{206}{21} = 9.80$$

Mediana :

$$Me = Li + \frac{\#-Fi^{-1}}{fi} \cdot ai$$

$$Me = 8 + \frac{11-8}{6} \cdot 4 = Me = 8 + \frac{3}{6} \cdot 4$$

$$Me = 8 + 0.5 \cdot 4 = 8 + 2 = 10$$

Moda :

$$Mo = Li + \frac{fi - fi^{-1}}{(fi - fi^{-1}) + (fi - f^{+1})} \cdot ai$$

$$Mo = 8 + \frac{6-5}{(6-5)+(6-4)} \cdot 4$$

$$Mo = 8 + \frac{1}{1+2} = 8 + \frac{1}{3} \cdot 4$$

$$Mo = 8 + 0.33 \cdot 4$$
$$Mo = 8 + 1.32$$
$$Mod = 9.32$$

a) Cuartil número 3.

$$Q_3 = \frac{3(21)}{4}$$

$$Q_3 = \frac{63}{4}$$

$Qu = 15.75$ $\qquad$ $Q_3 = 16$

b) Percenti numero 8

$$D_8 = 8(21) / 10$$

$$D_8 = \frac{168}{10}$$

$$D_8 = 16.8 \approx 17$$

c) Percentil número 45

$$P = 45(21) / 100$$

$$P = \frac{45 \times 21}{100}$$

$$P = \frac{945}{100} = 9.45 \approx 9.$$