

INSTITUTO PRIVADO MIXTO RAFAEL AREVALO MARTINEZ

Nombre: José Isaías Alvarado Ramos

Catedrático: Josué Estrada

Carrera: 4.to Bachillerato en Computación

Curso: Estadística

Ciclo Escolar: 2021

Actividad 1

$$K = 1 + 3.322 \log(45)$$

$$K = 1 + 3.322 \log(1.65321)$$

$$K = 1 + 5.49$$

$$K = 6.49$$

$$D = 90 - 34 + 1$$

$$D = 56 + 1$$

$$D = 57$$

$$I = \frac{D}{K} = \frac{57}{6.49} = 8.78 \quad I = 9$$

Puntajes obtenidos por 45 alumnos en un examen de matemáticas financiera.

L-A	LRI	LRS	XS	F	Fa	Fxs
34-42	33.5	47.5	38	2	2	76
43-51	42.5	51.5	47	3	5	141
52-60	51.5	60.5	56	9	13	504
61-69	60.5	69.5	65	13	26	845
70-78	69.5	78.5	74	10	36	740
79-87	78.5	87.5	83	3	39	249
88-96	87.5	96.5	92	4	43	368
						Σ fxs 3061

Media Aritmética

$$\bar{X} = \frac{\sum fxs}{N} \quad \bar{X} = \frac{3061}{45} = 67.80$$

Mediana

$$Md = L_{ri} + \left(\frac{\frac{N}{2} - F_{a2}}{f} \right) i \quad 45/2 = 22.5$$

$$Md = 60.5 + \left(\frac{22.5 - 13}{13} \right) 9$$

$$Md = 60.5 + \left(\frac{95}{13} \right) 9$$

$$Md = 60.5 + 6.57$$

$$Md = 67.07$$

Moda

$$Mo = L_{vi} + \left(\frac{\Delta_1}{\Delta_1 + \Delta_2} \right) i$$

$$\Delta_1 = 13 - 8 = 5$$

$$\Delta_2 = 13 - 10 = 3$$

$$Mo = 60.5 + \left(\frac{5}{5+3} \right) 9$$

$$Mo = 60.5 + \left(\frac{5}{8} \right) 9$$

$$Mo = 60.5 + (0.63) 9$$

$$Mo = 60.5 + 5.67$$

$$Mo = 66.17$$