



Instituto Privado “Rafael Arévalo Martínez”

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Profesor:

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Curso:

Estadística

Grado:

6to. Perito Contador

Ciclo Escolar:

2021

Actividad No.1

ACTIVIDAD 1

Puntajes obtenidos por 45 alumnos en un examen de matemática financiera

$$\begin{aligned}
 K &= 1 + 3.322 \quad \text{long } 45 \\
 h &= 1 + 3.322 \quad (1.65321) \\
 h &= 1 + 5.49 \\
 h &= 6.49
 \end{aligned}$$

$$\begin{aligned}
 R &= 90 - 34 + 1 \\
 R &= 56 + 1 \\
 R &= 57
 \end{aligned}$$

$$i = \frac{57}{6.49} = 8.78 \quad i = 9$$

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K	L-A	Lri	Lrs	xs	f	fa	Fx
1	34-42	33.5	42.5	38	2	2	76
2	43-51	42.5	57.5	47	3	5	141
3	52-60	57.5	60.5	56	8	13	448
4	61-69	60.5	69.5	65	13	26	845
5	70-78	69.5	78.5	74	10	36	740
6	79-87	78.5	87.5	83	3	39	249
7	88-96	87.5	96.5	92	6	45	552

Scribe

$$\sum fx = 3051$$

Media Aritmetica

$$\bar{X} = \frac{\sum f \times S}{N}$$

$$\bar{X} = \frac{3051}{45} = 67.80$$

Mediana

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

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

$$Md = 60.5 + \left(\frac{9.5}{13} \right) 9$$

$$Md = 60.5 + (0.73) 9$$

$$Md = 60.5 + 6.57$$

$$Md = 67.07$$

Moda

$$M_o = L_{ri} + \left(\frac{\Delta_1}{\Delta_1 + \Delta_2} \right) i \quad \begin{array}{l} \Delta_1 = 73 - 8 = 5 \\ \Delta_2 = 73 - 70 = 3 \end{array}$$

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

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

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

$$M_o = 60.5 + 5.67$$

$$M_o = 66.17$$