

INSTITUTO PRIVADO RAFAEL ARÉVALO MARTÍNEZ

IPRAM



Litzy Rosita De León Ramírez

4to Perito en Admón. de Empresas

Catedra: Estadística

Catedrático: Josué Estrada

TAREA No.8

Ciclo Escolar:

2,021

Semana 8

Calcule la media aritmética, mediana y modo de la siguiente tabla. Complete las columnas que hacen falta.

Puntajes obtenidos por 35 alumnos en un examen de Matemática Financiera.

LA	Lvi	Lvs	Xs	F	Fa	Fxs
57-62	56.5	62.5	59.5	4	4	238
63-68	62.5	68.5	65.5	4	8	262
69-74	68.5	74.5	71.5	4	12	286
75-80	74.5	80.5	77.5	11	23	852.5
81-86	80.5	86.5	83.5	6	29	501
87-92	86.5	92.5	89.5	5	34	447.5
93-98	92.5	98.5	95.5	1	35	95.5

35

2,682.5

$$\bar{X} = \frac{\sum fxs}{N}$$

$$\bar{X} = \frac{2,682.5}{35} = 76.64$$

$$Md = Lvi + \left(\frac{\frac{N}{2} - faa}{f} \right) i$$

$$35 / 2 = 17.5$$

$$Md = 74.5 + \left(\frac{17.5 - 12}{11} \right) 6$$

$$Md = 74.5 + \left(\frac{5.5}{11} \right) 6$$

$$Md = 74.5 + (0.5) 6$$

$$Md = 74.5 + 3$$

$$Md = 77.5$$

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

$$\Delta_1 = 11 - 4 = 7$$

$$\Delta_2 = 11 - 6 = 5$$

$$M_o = 74.5 + \left(\frac{7}{7+5} \right) 6$$

$$M_o = 74.5 + \left(\frac{7}{12} \right) 6$$

$$M_o = 74.5 + (0.58) 6$$

$$M_o = 74.5 + 0.10$$

$$M_o = 74.6$$

$$M_d = L_{vi} + \left(\frac{\frac{N}{2} - f_{og}}{p} \right) i$$

$$35 / 2 = 18$$

$$M_d = 74.5 + \left(\frac{18 - 12}{11} \right) 6$$

$$M_d = 74.5 + \left(\frac{6}{11} \right) 6$$

$$M_d = 74.5 + (0.55) 6$$

$$M_d = 74.5 + 3.3$$

$$M_d = 77.5$$

$$\bar{X} = \frac{\sum fxs}{N}$$

$$\bar{X} = \frac{2684}{35} = 76.69$$