

Instituto Privado Mixto
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Grado: 4to Bachillerato en Computación con
Orientación en Comercio

Sección: A

Ciclo Escolar: 2021

Puntajes de 25 alumnos en un examen de contabilidad de Sociedades

70 66 72 75 74 81 76 75 78 76
65 77 81 80 72 90 81 81 72 66
55 69 84 79 83

Ordenar

49 55 65 66 66 70 72 72 72 74
75 75 76 76 77 78 79 80 81 81
81 81 83 84 90

$$K = 1 + 3.322 \log(25)$$

$$K = 1 + 3.322 \log(1.39794)$$

$$K = 1 + 4.64$$

$$K = 5.64$$

$$D = 90 - 49 + 1$$

$$D = 41 + 1$$

$$D = 42$$

Li, Lrs, xs, f, fa y fxs

$$I = \frac{D}{K} = \frac{42}{5.64} = 7.45$$

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x	Intervalo	Li	Lrs	xs	f	fa	fxs
1	49-55	48.5	55.5	52	2	2	104
2	56-62	55.5	62.5	59	0	0	0
3	63-69	62.5	69.5	66	3	5	198
4	70-76	69.5	76.5	73	9	14	657
5	77-83	76.5	83.5	80	9	23	720
6	84-90	83.5	90.5	87	2	25	174
							1853

Mediana Aritmética

$$X = \frac{\sum fxs}{N} = \frac{1853}{25} = 74.12$$

Mediana

$$Md = Li + \left(\frac{\frac{N}{2} - fa}{f} \right) i \quad 25/2 = 12.5$$

$$Md = 69.5 + \left(\frac{12.5 - 5}{9} \right) 7$$

$$Md = 69.5 + \left(\frac{7.5}{9} \right) 7$$

$$Md = 69.5 + 5.81$$

$$Md = 75.31$$

Moda

$$Mo = L_{ri} + \left(\frac{\Delta_1}{\Delta_1 + \Delta_2} \right) i \quad 69.5 + \left(\frac{6}{6} \right) 6$$

$$\Delta_1 = 9 - 3 = 6$$

$$\Delta_2 = 9 - 9 = 0$$

$$Mo = 69.5 + \left(\frac{6}{6} \right) 6$$

$$Mo =$$

Quantiles

$$Q_1 = L_{ri} + \left(\frac{N/4 - f_{aa}}{f} \right) i \quad 25/4 = 6.25$$

$$Q_1 = 69.5 + \left(\frac{6.25 - 5}{9} \right) 7 \quad Q_1 = 70.477$$

$$Q_2 = L_{ri} + \left(\frac{2N/4 - f_{aa}}{f} \right) i \quad \frac{2 \times 25}{4} = 12.5$$

$$Q_2 = 69.5 + \left(\frac{12.5 - 5}{9} \right) 7 \quad Q_2 = 75.81$$

$$Q_3 = L_{ri} + \left(\frac{3N/4 - f_{aa}}{f} \right) i \quad \frac{3 \times 25}{4} = 18.75$$

$$Q_3 = 76.5 + \left(\frac{18.25}{9} - 14 \right) \times 7 \quad Q_3 = 80.21$$

Deciles

$$D_2 = L_{ri} + \left(\frac{\frac{N_2}{10} - F_{aa}}{f} \right) \times 7 \quad \frac{7.5 \times 2}{10} = 1.5$$

$$D_2 = 62.5 + \left(\frac{1.5 - 0}{3} \right) \times 7$$

$$D_2 = 62.5 + \left(\frac{3}{3} \right) \times 7 \quad 63.88$$

$$D_7 = 62.5 + \left(\frac{1}{3} \right) \times 7$$

$$D_2 = 62.5 + 7$$

$$D_2 = 69.5$$

$$D_6 = L_{ri} + \left(\frac{\frac{N_6}{10} - F_{aa}}{f} \right) \times 7 \quad \frac{6 \times 2.5}{10} = 1.5$$

$$D_6 = 69.5 + \left(\frac{1.5 - 14}{9} \right) \times 7$$

$$D_6 = 69.5 + \left(\frac{1}{9} \right) \times 7$$

$$D_6 = 69.5 + \left(0.11 \right) \times 7$$

$$D_6 = 69.5 + 0.77$$

$$D_6 = 70.27$$

15, 70 y 95

$$D_9 = L_{ri} + \left(\frac{\frac{N_9 - f_{an}}{10}}{f} \right) i \quad \frac{9 \times 25}{10} = 22.5$$

$$D_9 = 76.5 + \left(\frac{22.5 - 14}{9} \right) 7$$

$$D_9 = 76.5 + \left(\frac{8.5}{9} \right)$$

$$D_9 = 76.5 + (0.94)$$

$$D_9 = 76.5 + 0.94$$

$$D_9 = 77.44$$

Percentiles

$$P_x = L_{ri} + \left(\frac{\frac{N_x - f_{an}}{100}}{f} \right) i$$

$$P_{15} = L_{ri} + \left(\frac{N_{15} - f_{an}}{100} \right) i \quad \frac{25 \times 15}{100} = 3.75$$

$$P_{15} = 62.5 + \left(\frac{3.75 - 2}{3} \right) 7$$

$$P_{15} = 62.5 + (0.58) 7 \quad P_{15} = 62.5 + 4.06$$

$$P_{15} = 66.56$$

$$Px = Lri + \frac{(Nx - Faa)}{\frac{100}{f}} i$$

$$D_{70} = Lri + \frac{(N_{70} - Faa)}{\frac{100}{f}} i \quad \frac{25 \times 70}{100} = 17.5$$

$$D_{70} = 76.5 + \left(\frac{17.5 - 14}{9} \right) 7$$

$$D_{70} = 76.5 + (0.39) \quad D_{70} = 76.5 + 2.73$$

$$D_{70} = 79.23$$

$$Px = Lri + \frac{(Nx - Faa)}{\frac{100}{f}} i$$

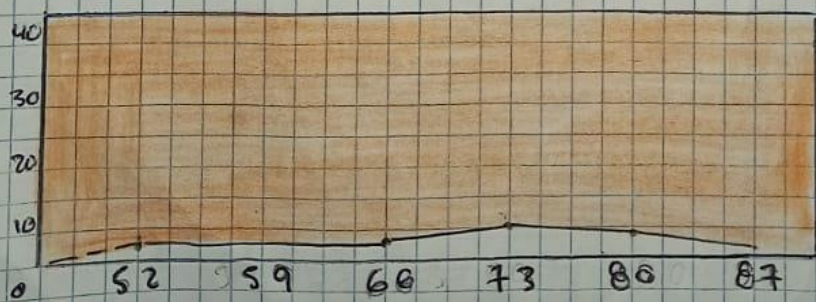
$$P_{95} = Lri + \frac{(N_{95} - Faa)}{\frac{100}{f}} i \quad \frac{25 \times 95}{100} = 23.75$$

$$P_{95} = 83.5 + \left(\frac{23.75 - 23}{7} \right) 7$$

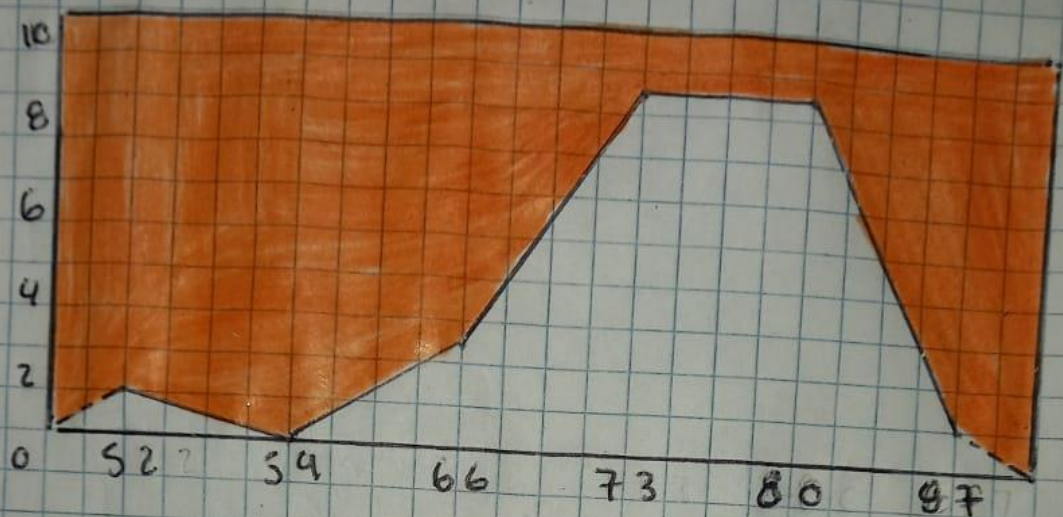
$$P_{95} = 83.5 + (0.75) \quad P_{95} = 83.5 + 5.25$$

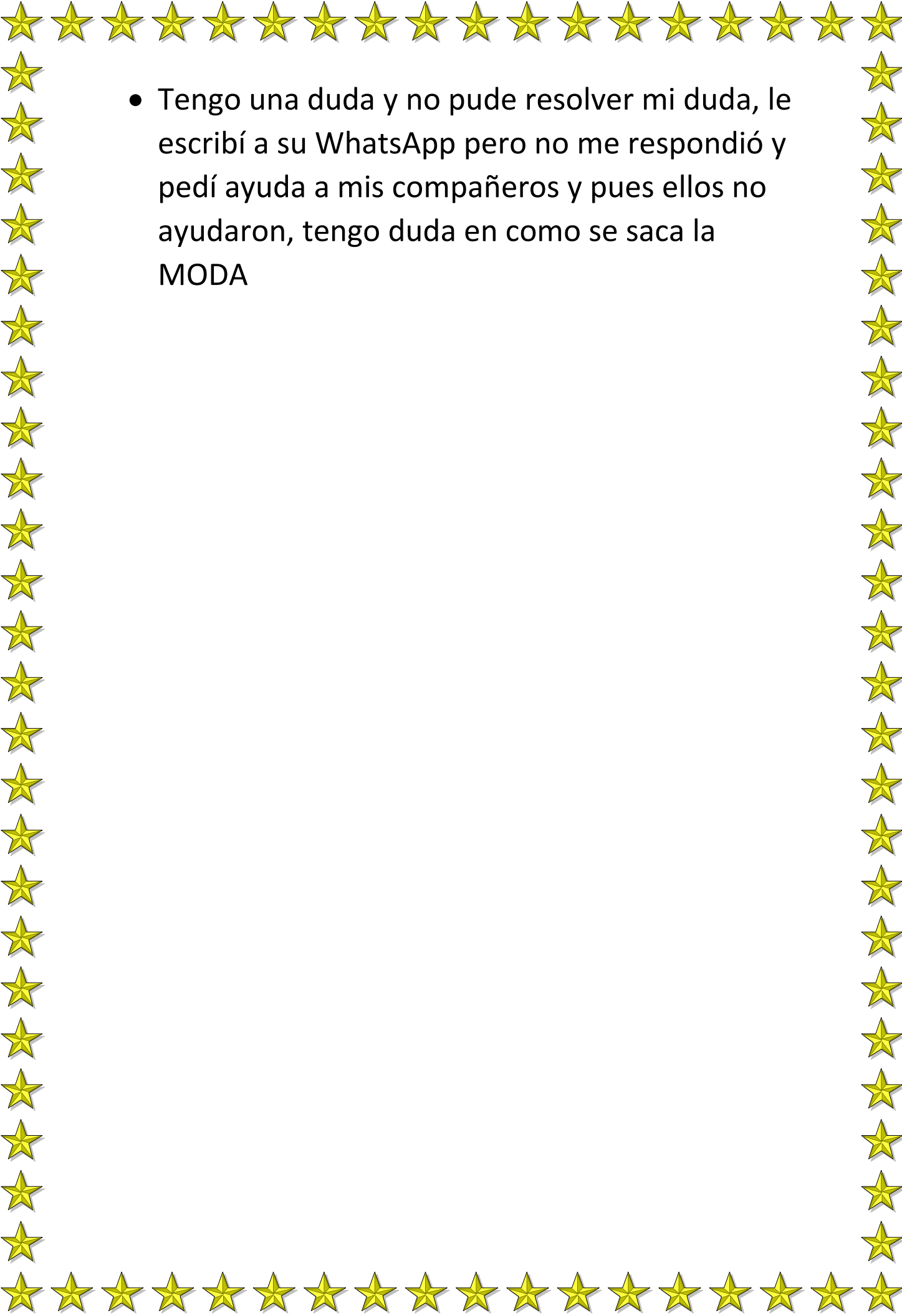
$$P_{95} = 88.75$$

Puntajes de 25 alumnos en un examen de contabilidad de sociedades



Puntajes de 25 alumnos de contabilidad de scores en un examen



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- Tengo una duda y no pude resolver mi duda, le escribí a su WhatsApp pero no me respondió y pedí ayuda a mis compañeros y pues ellos no ayudaron, tengo duda en como se saca la MODA