

Aetovodod 8 Rafael Arcego

1) ordene datos

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

2) calcule k

$$K = 1 + 3.322 \quad \log(n)$$

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

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

$$K = 1 + 4.64$$

$$K = 5.64$$

3) calcule R

$$90 - 49 = 41$$

$$41 + 1 = 42$$

4) calcule I

$$K = \frac{5.64}{42} = 9) 7.45 \quad 1) 7$$

$$R = 42$$

Intervalo	l _{ri}	l _{rs}	x _s	F	PQ	Fx _s
49-55	48.5	55.5	52	2	2	104
56-62	55.5	62.5	59	0	2	0
63-69	62.5	69.5	66	3	5	198
70-76	69.5	76.5	73	9	14	657
77-83	76.5	83.5	80	9	23	720
84-90	83.5	90.5	87	2	25	174

1853

$$\bar{x} = \frac{1853}{25} = \text{74.12}$$

Median

$$Md = l_{n^o} + \left(\frac{\frac{N}{2} - f_{aa}}{F} \right) \cdot$$

$$\frac{25}{2} = 12.5$$

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

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

$$Md = 69.5 + (0.83) \cdot 7$$

$$Md = 69.5 + 5.87$$

$$Md = 75.37$$

Modi

$$\Delta_1 = 9 - 9 = 0$$

$$\Delta = 9 - 2 = 7$$

$$MO = 15.04 \left(\frac{\Delta_1}{\Delta_1 + \Delta_2} \right) f$$

$$MO = 76.5 + \left(\frac{0}{0+7} \right) 7$$

$$MO = 76.5 + ($$

$$MO = 76.5$$

Calcule cuartiles

$$Q1 = \frac{25}{4} \times 1 = 6.25$$

$$Q1 = 69.5 + \left(\frac{6.25 - 5}{9} \right) 7$$

$$Q1 = 69.5 + \left(\frac{1.25}{9} \right) 7$$

$$Q1 = 69.5 + (0.14) 7$$

$$Q1 = 69.5 + 0.98$$

$$Q1 = 70.48$$

Q2 $\frac{25}{4} \times 2 = 12.5$

$$Q2 = 69.5 + \left(\frac{12.5 - 5}{9} \right) 7$$

$$Q2 = 69.5 + \left(\frac{7.5}{9} \right) 7$$

$$Q2 = 69.5 + (0.83) 7$$

$$Q2 = 69.5 + 5.81$$

$$Q2 = 75.31$$

Q3

$$\frac{25}{4} \times 3 = 18.75$$

$$Q3 = 76.5 + \left(\frac{18.75}{9} - 14 \right) 7$$

$$Q3 = 76.5 + \left(\frac{4.75}{9} \right) 7$$

$$Q3 = 76.5 + (0.53) 7$$

$$Q3 = 76.5 + 3.71$$

$$Q3 = 80.21$$

1. Calcule deciles 2, 6 y 8

Deci 2

$$\frac{25}{10} \times 2 = 5$$

$$D_2 = 62.5 + \frac{(5 - 2) \cdot 7}{3}$$

$$D_2 = 62.5 + \frac{(3) \cdot 7}{3}$$

$$D_2 = 62.5 + (1) \cdot 7$$

$$D_2 = 62.5 + 7$$

$$D_2 = 69.5$$

Dec 1 6

$$\frac{25}{10} \times 6 = 15$$

$$D6 = 76.5 + \left(\frac{15 - 14}{9} \right) 7$$

$$D6 = 76.5 + \left(\frac{7}{9} \right) 7$$

$$D6 = 76.5 + (0.77) 7$$

$$D6 = 76.5 + 0.77$$

$$D6 = 77.27$$

Dec 9

$$\frac{25}{10} \times 9 = 22.5$$

$$DQ = 76.5 + \frac{(22.5 - 14)}{9} 7$$

$$DQ = 76.5 + \frac{(22.5 - 14)}{9} 7$$

$$DQ = 76.5 + \frac{(8.5)}{9} 7$$

$$DQ = 76.5 + (0.94) 7$$

$$DQ = 76.5 + 6.58$$

$$DQ = 83.08$$

8. Calcular percepciones 15, 70 y 95

$$p15 = \frac{25}{100} \times 15 = 3.75$$

$$p15) 62.5 + \left(\frac{3.75 - 2}{3} \right) 7$$

$$p15) 62.5 + \left(\frac{1.75}{3} \right) 7$$

$$p15 = 62.5 + (0.58) 7$$

$$p15 = 62.5 + 4.06$$

$$p15 = 66.56$$

70 y 95

P70

$$\frac{25}{100} \times 70 = 17.5$$

$$P70 = 76.5 + \left(\frac{17.5 - 14}{9} \right) 7$$

$$P70 = 76.5 + \left(\frac{3.5}{9} \right) 7$$

$$P70 = 76.5 + (0.39) 7$$

$$P70 = 76.5 + 2.73$$

$$P70 = 79.23$$

P95

$$\frac{25 \times 23.75}{100}$$

$$P95 = 83.5 + \left(\frac{23.75 - 23}{2} \right) \cdot 7$$

$$P95 = 83.5 + \left(\frac{0.75}{2} \right) \cdot 7$$

$$P95 = 83.5 + (0.38) \cdot 7$$

$$P95 = 83.5 + 2.66$$

$$P95 = 86.16$$

$$25 \times 23.75$$

095

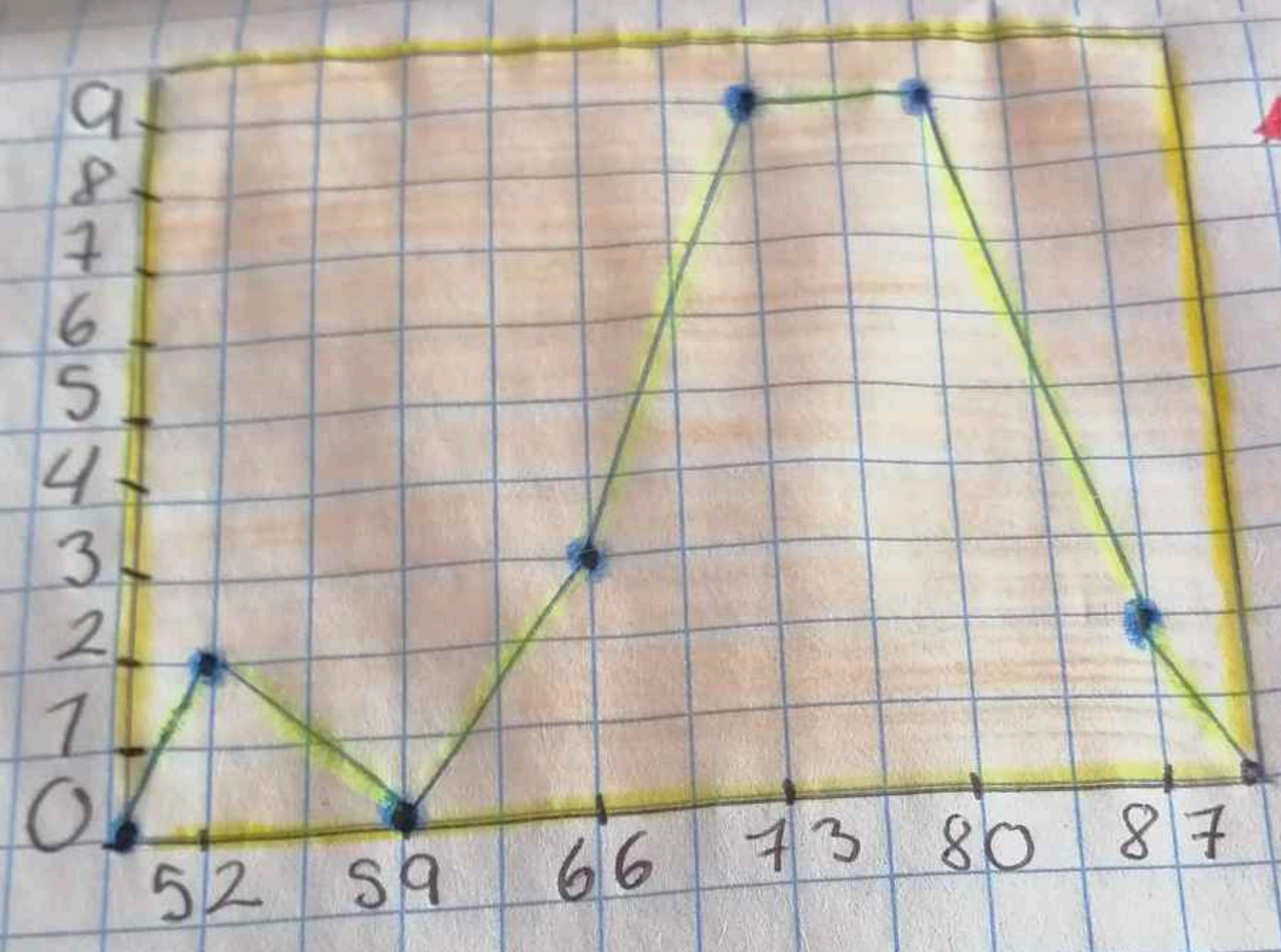
$$83.5 + \frac{(23.75 - 23)}{2} \cdot 7$$

$$83.5 + \frac{(0.75)}{2} \cdot 7$$

$$83.5 + (0.38) \cdot 7$$

$$83.5 + 2.66$$

$$86.16$$



polígono de frecuencia