



Instituto Privado “Rafael Arévalo Martínez”

Nombre:

Shirley Fabiola Cac Miranda

Profesor:

Josué Estrada

Curso:

Estadística

Grado:

6to. Perito Contador

Ciclo Escolar:

2021

Actividad No.3

ACTIVIDAD 3

Punteos Obtenidos por 43 alumnos en un examen de Ciencias Naturales

Intervalo	f	Lri	Fa	Xs
54-58	4	53.5	4	56
59-63	6	58.5	10	61
64-68	12	63.5	22	66
69-73	13	68.5	35	71
74-78	3	73.5	38	76
79-83	4	78.5	42	81
84-88	1	83.5	43	86

Q1 Q2

Q3

$$Q1 = Lri + \left(\frac{N/4 - Fa_i}{f} \right) i$$

$$\frac{43}{4} = 10.75$$

$$Q1 = 63.5 + \left(\frac{10.75 - 10}{12} \right) 5$$

$$Q1 = 63.5 + \left(\frac{0.75}{12} \right) 5$$

$$Q1 = 63.5 + (0.06) 5$$

$$Q1 = 63.5 + 0.3$$

$$Q1 = \underline{\underline{63.8}}$$

$$Q_2 = Lr_i + \left(\frac{2N}{4} - f_{aa} \right) i$$

$$\frac{2 \times 43}{4} = 21.5$$

$$Q_2 = 63.5 + \left(\frac{21.5 - 10}{12} \right) 5$$

$$Q_2 = 63.5 + \left(\frac{11.5}{12} \right) 5$$

$$Q_2 = 63.5 + (0.96) 5$$

$$Q_2 = 63.5 + 4.8$$

$$Q_2 = \underline{\underline{68.3}}$$

$$Q_3 = Lr_i + \left(\frac{3N}{4} - f_{aa} \right) i$$

$$\frac{3 \times 43}{4} = 32.25$$

$$Q_3 = 68.5 + \left(\frac{32.25 - 22}{13} \right) 5$$

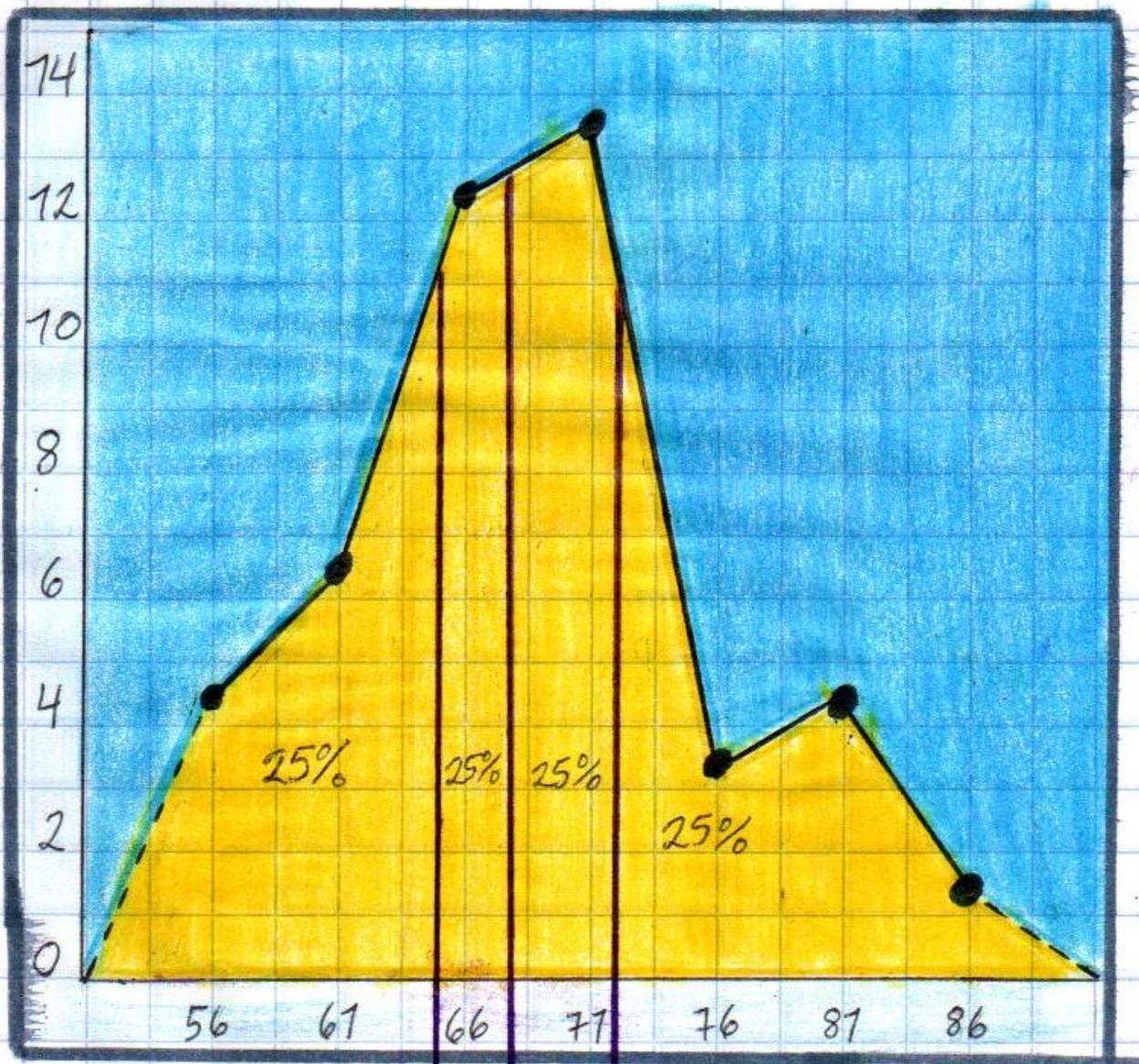
$$Q_3 = 68.5 + \left(\frac{10.25}{13} \right) 5$$

$$Q_3 = 68.5 + (0.79) 5$$

$$Q_3 = 68.5 + 3.95$$

$$Q_3 = \underline{\underline{72.45}}$$

Polígono de Frecuencia Punteos Obtenidos por 43 alumnos en un examen de Ciencias Naturales



$$Q1 = 63.8 \quad Q2 = 68.3 \quad Q3 = 72.45$$

$$QD = \frac{Q3 - Q1}{2}$$

$$QD = \frac{72.45 - 63.8}{2} = \underline{\underline{4.33}}$$