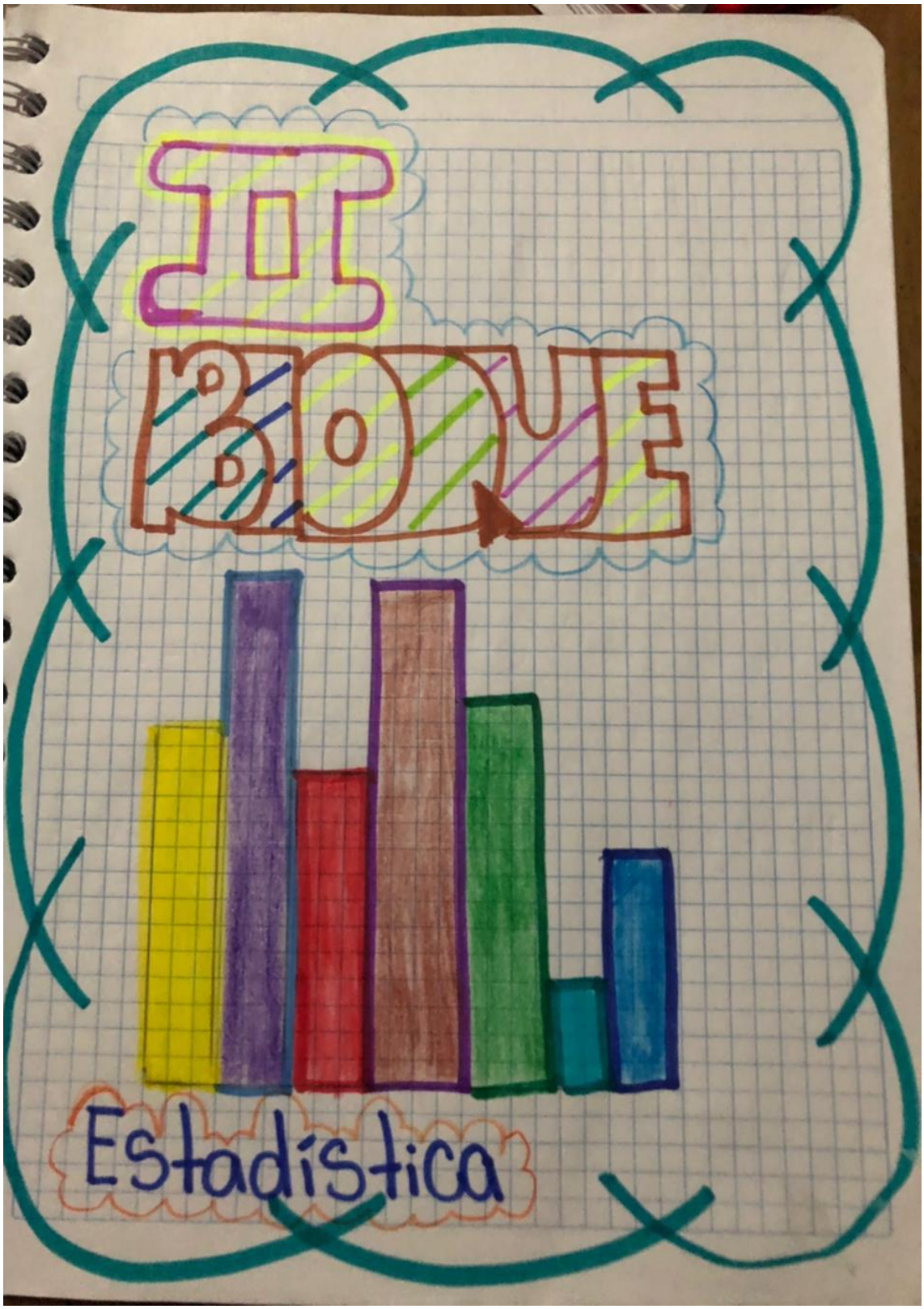
JL
BOX
Estadística

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Curso: Estadistica II

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Act. NO. 01 Con la tabla Calcular Cuartiles: 1 y 3. Deciles: 1 y 5 y Percentiles: 70 y 85 Examen de sexto Primaria.

Exame de sexto Primaria.

X	f	fa	Lri
48-56	5	5	48.5
57-65	8	13	565
66-74	7	20	65.5
75-83	9	29	74.5
84-92	6	35	835

Cuartil 1

$Q1 = Lri + \left(\frac{1N/4 - faa}{f}\right) i$

$\frac{1N}{4} = \frac{35}{4} = 8.75$

$Q1 = 56.5 + \left(\frac{8.75 - 5}{8}\right) 9$

$Q1 = 56.5 + \left(\frac{3.75}{8}\right) 9$

$Q1 = 56.5 + (0.47)\ 9$

$Q1 = 56.5 + 4.23$

$Q1 = 60.73$

Cuartil 3

$Q3 = Lri + \left(\frac{3N/4 - faa}{f}\right) i$

$\frac{3N}{4} = \frac{105}{4} = 26.25$

$Q3 = 74.5 + \left(\frac{26.25 - 20}{9}\right) 9$

$Q3 = 74.5 + \left(\frac{6.25}{9}\right) 9$

$Q3 = 74.5 + (0.70)\ 9$

$Q3 = 74.5 + 6.3$

$Q3 = 80.80$

Decil 1

$$D_1 = Li + \left(\frac{\frac{1N}{10} - faa}{f}\right) i$$

$$\frac{1N}{10} = 3.5$$

$$D_1 = 48.5 + \left(\frac{3.5 - 0}{5}\right) 9$$

$$D_1 = 48.5 + \left(\frac{3.5}{5}\right) 9$$

$$D_1 = 48.5 + (0.7)9$$

$$D_1 = 48.5 + 6.3$$

$$D_1 = 54.80$$

Decil 5

$$D_5 = Li + \left(\frac{\frac{5N}{10} - faa}{f}\right) i$$

$$\frac{5N}{10} = \frac{175}{10} = 17.5$$

$$D_5 = 65.5 + \left(\frac{17.5 - 13}{7}\right) 9$$

$$D_5 = 65.5 + \left(\frac{4.5}{7}\right) 9$$

$$D_5 = 65.5 + (0.64)9$$

$$D_5 = 65.5 + 5.76$$

$$D_5 = 71.26$$

Percentil 70

$$P_{70} = Li + \left(\frac{\frac{70N}{100} - faa}{f}\right) i$$

$$\frac{70N}{100} = 24.5$$

$$P_{70} = 74.5 + \left(\frac{24.5 - 20}{9}\right) 9$$

$$P_{70} = 74.5 + \left(\frac{4.5}{9}\right) 9$$

$$P_{70} = 74.5 + (0.5)9$$

$$P_{70} = 74.5 + 4.5$$

$$P_{70} = 79$$

Percentil 85

$$P_{85} = Li + \left(\frac{\frac{85N}{100} - faa}{f}\right) i$$

$$\frac{85N}{100} = 29.75$$

$$P_{85} = 83.5 + \left(\frac{29.75 - 29}{6}\right) 9$$

$$P_{85} = 83.5 + \left(\frac{0.75}{6}\right) 9$$

$$P_{85} = 83.5 + (0.13)9$$

$$P_{85} = 83.5 + 1.17$$

$$P_{85} = 84.67$$