

ESTADISTICA II BLOQUE



TAREA #1

Calcular, ~~Des~~ Coefil 1 y 3, Decil 1 y 5, Percentil 70 y 85.

Examen de matemática de Sexto Primaria

k	X	f	fa	hri	
1	48 - 56	5	5	47.5	D1
2	57 - 65	8	13	56.5	Q1
3	66 - 74	7	20	65.5	D5
4	75 - 83	9	29	74.5	Q3, P70
5	84 - 92	6	35	83.5	P85

$$Q_1 = hri + \left(\frac{\frac{n}{4} - fa_{i-1}}{f} \right) i = 56.5 + \left(\frac{8.75 - 5}{8} \right) 9 = 56.5 + \left(\frac{3.75}{8} \right) 9 \Rightarrow$$

$$56.5 + (0.47) 9 = 56.5 + 4.23 = 60.73$$

$$Q_3 = hri + \left(\frac{\frac{3n}{4} - fa_{i-1}}{f} \right) i = 74.5 + \left(\frac{26.25 - 20}{9} \right) 9 = 74.5 + \left(\frac{6.25}{9} \right) 9 = 74.5 + (0.69) 9 \Rightarrow$$

$$= 74.5 + 6.21 = 80.71$$

$$D_1 = hri + \left(\frac{\frac{n}{10} - fa_{i-1}}{f} \right) i = 47.5 + \left(\frac{3.5 - 0}{5} \right) 9 = 47.5 + (0.7) 9 = 47.5 + 6.3 = 53.8$$

$$D_5 = hri + \left(\frac{\frac{5n}{10} - fa_{i-1}}{f} \right) i = 65.5 + \left(\frac{17.5 - 13}{7} \right) 9 = 65.5 + \left(\frac{4.5}{7} \right) 9 = 65.5 + (0.64) 9 \Rightarrow$$

$$65.5 + 5.76 = 71.26$$

$$P_{10} = h_i + \left(\frac{m_{10} - f_{\text{max}}}{f} \right) i = 74.5 + \left(\frac{24.5 - 20}{9} \right) 9 = 74.5 + \left(\frac{4.5}{9} \right) 9 \Rightarrow$$

$$74.5 + (0.5) 9 = 74.5 + 4.5 = 79$$

$$P_{85} = h_i + \left(\frac{m_{85} - f_{\text{max}}}{f} \right) i = 83.5 + \left(\frac{29.75 - 29}{10} \right) 9 = 83.5 + \left(\frac{0.75}{10} \right) 9 \Rightarrow$$

$$= 83.5 + (0.13) 9 = 83.5 + 1.17 = 84.67$$