IPRAM

Estudiante: Sheyla Rocío Alvarado García

Grado y Curso: 5.to Admón

Curso:

ESTADÍSTICA II

Temas: CUARTILES-DECILES-PERCENTILES

Tarea #1

30/04/2021

Sheyla Alvarado Tarea #1 / 30 / 04 / 21

Calcular lo siguiente:
Cuartiles: 1 y 3
Deciles: 1 y 5
Percentiles: 70 y 85

Examen de Matemática de Sexto Primaria

I	A	Lri	F	Fa
48 - 56		47.5	5	5
57 - 65		56.5	8	13
66 - 74		65.5	7	20
75 - 83		74.5	9	29
84 - 92		83.5	6	35

$Q1 = Lri + \left(\frac{n/4 - Faa}{F}\right)i$ 35/4 = 8.75

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

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

$Q1 = 56.5 + (0.47)9$

$Q1 = 56.5 + 4.23$

$Q1 = 60.73$

$Q3 = Lri + \left(\frac{3n/4 - Faa}{F}\right)i$ 3x35/4 = 26.25

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

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

$Q3 = 74.5 + (0.69)9$

$Q3 = 74.5 + 6.21$

$Q3 = 80.71$

Sheyla Alvarado

30 / 04

Decil 1

$D1 = Lri + \left(\frac{N1/10 - Faa}{f}\right) i$ $\quad 35 \times 1/10 = 3.5$

$D1 = 47.5 + \left(\frac{3.5 - 0}{5}\right) 9$

$D1 = 47.5 + \left(\frac{3.5}{5}\right) 9$

$D1 = 47.5 + (0.70)9$

$D1 = 47.5 + 6.30$

$D1 = 53.8$

Decil 5

$D5 = Lri + \left(\frac{N5/10 - Faa}{f}\right) i$ $\quad 35 \times 5/10 = 17.5$

$D5 = 65.5 + \left(\frac{17.5 - 13}{7}\right) 9$

$D5 = 65.5 + \left(\frac{4.5}{7}\right) 9$

$D5 = 65.5 + (0.64)9$

$D5 = 65.5 + 5.76$

$D5 = 71.26$

Sheyla Alvarado

30/04/21

Percentil 70

$P70 = Lrit + \left(\frac{N\,70/100 - Fac}{F} \right) i$ $\quad 35 \times 70/100 = 24.50$

$P70 = 74.5 + \left(\frac{24.5 - 20}{9} \right) 9$

$P70 = 74.5 + \left(\frac{4.5}{9} \right) 9$

$P70 = 74.5 + (0.5)\,9$

$P70 = 74.5 + 4.5$

$P70 = 79$

Percentil 85

$P85 = Lrit + \left(\frac{N\,85/100 - Fac}{F} \right) i$ $\quad 35 \times 85/100 = 29.75$

$P85 = 83.5 + \left(\frac{29.75 - 29}{6} \right) 9$

$P85 = 83.5 + \left(\frac{0.75}{6} \right) 9$

$P85 = 83.5 + (0.13)\,9$

$P85 = 83.5 + 1.17$

$P85 = 84.67$