



NOMBRE DEL ALUMNO:

David Alejandro Silva García

NOMBRE DEL CATEDRATICO:

Jorge Enrique Aguilar Albores

GRADO:

1°

GRUPO:

"A"

ASIGNATURA:

Estadística descriptiva

CATRIMESTRE:

3er

COMITAN DE DOMINGUEZ, CHIAPAS, MEXICO A 20/06/2020

Datos Agrupados.

Datos.	f_i	fire	mc	$f_i \cdot mc$	fr	fir %.
15-35	8	8	25	200	0.66666	16.6666 %.
35-55	4	12	45	180	0.08333	8.3333 %.
55-75	12	24	65	975	0.25	25 %.
75-95	8	32	85	680	0.166666	16.6666 %.
95-115	7	39	105	735	0.1458333	14.5833 %.
115-135	3	42	125	375	0.0625	6.25 %.
135-155	6	48	145	870	0.125	12.5 %.

$$N = 48$$

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Decil 3, 7, 9

$$D_k = Li + A \left(\frac{\frac{kn}{10} - Fi - 1}{F_i - Fi - 1} \right) \text{ posición } \frac{kn}{10}$$

Datos	fi	Fi		
5-35	8	8	$1 - D_3 \rightarrow \frac{3 \times 48}{10} = 14.4$	
5-45	4	12	$Li - 1 = 12$	$Li = 45$
5-55	12	24	$Fi = 24$	$A = L_5 - L_1 = 10$
5-65	8	32	$D_3 = 45 + 10 \left(\frac{14.4 - 12}{24 - 12} \right)$	
5-75	7	39	$D_3 = 45 + 10 \left(\frac{2.4}{12} \right)$	
5-85	3	42	$D_3 = 45 + 2$	
5-95	6	48	$D_3 = 47$	

$$2 - D_7 \rightarrow \frac{7 \times 48}{10} = 36.6$$

$$Li - 1 = 32 \quad Li = 65$$

$$Fi = 39 \quad A = L_5 - L_1 = 10$$

$$D_7 = 65 + 10 \left(\frac{36.6 - 32}{39 - 32} \right)$$

$$D_7 = 65 + 6.5714$$

$$D_7 = 65 + 10 \left(\frac{4.6}{7} \right)$$

$$D_7 = 71.5714$$

$$3 - D_9 \rightarrow \frac{9 \times 48}{10} = 43.2$$

$$Li - 1 = 42 \quad Li = 85$$

$$Fi = 48 \quad A = L_5 - L_1 = 10$$

$$D_9 = 85 + 10 \left(\frac{43.2 - 42}{48 - 42} \right)$$

$$D_9 = 85 + 10 \left(\frac{1.2}{6} \right)$$

$$D_9 = 85 + 2$$

$$D_9 = 87$$

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Percentil. 40, 57, 78

Datos	f_i	F_i
25 - 35	8	8
35 - 45	4	12
45 - 55	12	24
55 - 65	8	32
65 - 75	7	39
75 - 85	3	42
85 - 95	6	48

$$P_k = L_i + A \left(\frac{\frac{kn}{100} - F_{i-1}}{f_i - f_{i-1}} \right) \text{ Posición}$$

$$1. \cdot P_{40} \rightarrow \frac{40 \times 48}{100} = 19.2$$

$$f_{i-1} = 12 \quad L_i = 45$$

$$f_i = 24 \quad A = 10$$

$$P_{40} = 45 + 10 \left(\frac{19.5 - 12}{24 - 12} \right)$$

$$P_{40} = 45 + 10 \left(\frac{7.2}{12} \right)$$

$$P_{40} = 45 + 6$$

$$2. \cdot P_{57} \rightarrow \frac{57 \times 48}{100} = 27.36 \quad P_{40} = 51$$

$$f_{i-1} = 24 \quad L_i = 55$$

$$f_i = 32 \quad A = 10$$

$$P_{57} = 55 + 10 \left(\frac{27.36 - 24}{32 - 24} \right)$$

$$P_{57} = 55 + 10 \left(\frac{3.36}{8} \right)$$

$$P_{57} = 55 + 4.2$$

$$P_{57} = 59.2$$

$$3. \cdot P_{78} \rightarrow \frac{78 \times 48}{100} = 37.44$$

$$f_{i-1} = 32 \quad L_i = 65$$

$$f_i = 39 \quad A = 10$$

$$P_{78} = 65 + 10 \left(\frac{37.44 - 32}{39 - 32} \right)$$

$$P_{78} = 65 + 10 \left(\frac{5.44}{7} \right)$$

$$P_{78} = 6 + 7.77$$

$$P_{78} = 72.77$$

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