

Tema: EJERCICIO



- NOMBRE DEL ALUMNO: DENILSON ANTONIO CRUZ VELASCO
- NOMBRE DEL DOCENTE: JORGE ENRIQUE ALBORES ALGUILAR
- CARRERA: CONTADURIA Y FINANZAS
- CUATRIMESTRE: 3°
- MATERIA: ESTADISTICA DESCRIPTIVA
- COMITÁN DE DOMINGUEZ CHIAPAS, A 20 DE JUNIO DEL 2020

Datos Agrupados

Datos	F_i	F_{ire}	MC	$F_i \cdot MC$	F_y	$F_{ir} \%$
15-35	8	8	25	200	0.666	16.6%
35-55	4	12	45	180	0.083	8.3%
55-75	12	24	65	775	0.25	25%
75-95	8	32	85	680	0.166	16.6%
95-115	7	39	105	735	0.145	14.5%
115-135	3	42	125	375	0.062	6.2%
135-155	6	48	145	870	0.125	12.5%

Decil 3, 7, 9

Dato	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

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

$$\textcircled{1} D_3 \rightarrow \frac{3 \times 48}{10} = 14.4$$

$$L_{i-1} = 12$$

$$L_i = 45$$

$$F_i = 24$$

$$A = 45 - 12 = 10$$

$$D_3 = 45 + 10 \left(\frac{14.4 - 12}{24 - 12} \right)$$

$$D_3 = 45 + 10 \left(\frac{2.4}{12} \right)$$

$$D_3 = 45 + 2$$

$$D_3 = 47$$

$$\textcircled{2} D_7 \rightarrow \frac{7 \times 48}{10} = 33.6$$

$$L_{i-1} = 32$$

$$L_i = 65$$

$$F_i = 39$$

$$A = 65 - 32 = 10$$

$$D_7 = 65 + 10 \left(\frac{33.6 - 32}{39 - 32} \right)$$

$$D_7 = 65 + 10 \left(\frac{1.6}{7} \right)$$

$$D_7 = 65 + 6.5 \approx 71.5$$

$$D_7 = 71.5 \approx 72$$

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

$$L_{i-1} = 42$$

$$L_i = 85$$

$$F_i = 48$$

$$A = 85 - 42 = 10$$

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

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

$$D_9 = 85 + 2$$

$$D_9 = 87$$

Percentil 40, 57, 78.

Data	F1	F1
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

$$P_k = L_1 + A \left(\frac{\frac{K}{100} - F_1 - 1}{F_1 - F_1 - 1} \right) \text{ Posicion } \frac{K}{100}$$

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

$$F_1 - 1 = 12 \quad L_1 = 45$$

$$F_1 = 24 \quad A = 10$$

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

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

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

$$P_{40} = 51$$

$$\textcircled{2} P_{57} \rightarrow \frac{57 \times 48}{100} = 27.36$$

$$F_1 - 1 = 24 \quad L_1 = 55$$

$$F_1 = 32 \quad A = 10$$

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

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

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

$$P_{57} = 59.2$$

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

$$F_1 - 1 = 32 \quad L_1 = 65$$

$$F_1 = 39 \quad A = 10$$

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

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

$$P_{78} = 65 + 7.77$$

$$P_{78} = 72.77$$