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**Nombre del trabajo: Cuartiles,  
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PASIÓN POR EDUCAR

**Grado: 3er Cuatrimestre**

**Grupo: LAN02SDC0121 A**

Comitán de Domínguez Chiapas a 12 de julio de 2022

100	98	97	87	100	49	55	100
45	79	89	89	45	87	65	45
70	50	67	90	55	98	66	49
48	55	76	47	58	78	77	56
70	67	68	55	69	89	78	52
75	69	78	89	76	80	74	57
87	80	72	67	89	67	78	60
80	79	60	70	90	50	80	67

8 INTERVALOS

Rango	$f_i$	$F_{ia}$
45-51	9	9
52-58	8	17
59-65	3	20
66-72	13	33
73-79	11	44
80-86	4	48
87-93	10	58
94-100	6	64
	<u>64</u>	

$$R = (\text{Num Mayor} - \text{Num menor}) - 1$$

$$R = \frac{(100 - 45) + 1}{8}$$

$$R = 7$$

Cuartiles  $Q_k = L_i + \frac{k \cdot n}{4} - f_{i-1} \cdot a_i$

$$Q_1 = \frac{k \cdot n}{4} = \frac{1(64)}{4} = 16 / f_i$$

$$Q_1 = 52 + \frac{14 - 9}{8} \cdot 6 = 55.75 / \leftarrow$$

$$Q_2 = \frac{k \cdot n}{4} = \frac{2(64)}{4} = 32$$

$$Q_2 = 66 + \frac{32 - 20}{13} \cdot 6 = 71.53 / \leftarrow$$

$$Q_3 = \frac{k \cdot n}{4} = \frac{3(64)}{4} = 48$$

$$Q_3 = 80 + \frac{48 - 44}{4} \cdot 6 = 86 / \leftarrow$$

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Deciles  $D_k = L_i + \frac{kn}{10} - \frac{f_{i-1} \cdot a_i}{f_i} \cdot a_i$

$$D_1 = \frac{kn}{10} = \frac{1(64)}{10} = 6.4$$

$$D_1 = 45 + \frac{6.4 - 0}{9} \cdot 6 = \underline{49.26} / \swarrow$$

$$D_2 = \frac{kn}{10} = \frac{2(64)}{10} = 12.8$$

$$D_2 = 52 + \frac{12.8 - 9}{8} \cdot 6 = \underline{54.85} / \swarrow$$

$$D_3 = \frac{kn}{10} = \frac{3(64)}{10} = 19.2$$

$$D_3 = 59 + \frac{19.2 - 17}{3} \cdot 6 = \underline{63.40} / \swarrow$$

$$D_4 = \frac{kn}{10} = \frac{4(64)}{10} = 25.6$$

$$D_4 = 66 + \frac{25.6 - 20}{13} \cdot 6 = \underline{68.58} / \swarrow$$

$$D_5 = \frac{kn}{10} = \frac{5(64)}{10} = 32$$

$$D_5 = 66 + \frac{32 - 20}{13} \cdot 6 = \underline{71.53} / \swarrow$$

$$D_6 = \frac{kn}{10} = \frac{6(64)}{10} = 38.4$$

$$D_6 = 73 + \frac{38.4 - 33}{11} \cdot 6 = \underline{75.94} / \swarrow$$

$$D_7 = \frac{kn}{10} = \frac{7(64)}{10} = 44.8$$

$$D_7 = 80 + \frac{44.8 - 44}{4} \cdot 6 = \underline{81.2} / \swarrow$$

$$D_8 = \frac{kn}{10} = \frac{8(64)}{10} = 51.2$$

$$D_8 = 87 + \frac{51.2 - 48}{10} \cdot 6 = \underline{88.92} / \swarrow$$

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$$D9 = \frac{kn}{10} = \frac{9(64)}{10} = 57.6$$

$$D9 = 87 + \frac{57.6 - 48}{10} \cdot 6 = \underline{92.76} / \leftarrow$$

Percentiles  $P_k = L_i + \frac{\frac{kn}{100} - f_{i-1}}{f_i} \cdot d_i$

$$P_3 - P_7, P_9, P_{15}, P_{24}, P_{71}, P_{92}, P_{98}$$

$$P_3 = \frac{kn}{100} = \frac{3(64)}{100} = 1.92$$

$$P_3 = 45 + \frac{1.92 - 0}{9} \cdot 6 = 46.28$$

$$P_7 = \frac{kn}{100} = \frac{7(64)}{100} = 4.48$$

$$P_7 = 45 + \frac{4.48 - 0}{9} \cdot 6 = \underline{47.98} / \leftarrow$$

$$P_9 = \frac{kn}{100} = \frac{9(64)}{100} = 5.76$$

$$P_9 = 45 + \frac{5.76 - 0}{9} \cdot 6 = \underline{48.84} / \leftarrow$$

$$P_{15} = \frac{kn}{100} = \frac{15(64)}{100} = 9.6$$

$$P_{15} = 52 + \frac{9.6 - 9}{8} \cdot 6 = \underline{52.45} / \leftarrow$$

$$P_{24} = \frac{kn}{100} = \frac{24(64)}{100} = 15.36$$

$$P_{24} = 52 + \frac{15.36 - 9}{8} \cdot 6 = \underline{56.77} / \leftarrow$$

$$P_{71} = \frac{kn}{100} = \frac{71(64)}{100} = 45.44$$

$$P_{71} = 80 + \frac{45.44 - 44}{4} \cdot 6 = \underline{82.16} / \leftarrow$$

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$$P_{92} = \frac{Kn}{100} = \frac{92(64)}{100} = 58.88$$

$$P_{92} = 94 + \frac{58.88 - 58}{6} \cdot 6 = \underline{94.88} / 4$$

$$P_{98} = \frac{Kn}{100} = \frac{98(64)}{100} = 62.72$$

$$P_{98} = 94 + \frac{62.72 - 58}{6} \cdot 6 = \underline{98.72} /$$

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