



INDICE

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MAESTRO: MAGNER JOEL HERRERA

MATERIA: ESTADISTICA DESCRIPTIVA

NOMBRE DEL TRABAJO: MEDIDAS DE POSICIÓN

GRADO: 3

GRUPO: "C"

FECHA DE ENTREGA: 26/07/2020

①

x_1	x_2	x_3	x_4	x_5	x_6	x_7	x_8	x_9	x_{10}
50	50	52	53	55	56	56	56	56	57
x_{11}	x_{12}	x_{13}	x_{14}	x_{15}	x_{16}	x_{17}	x_{18}	x_{19}	x_{20}
58	58	58	58	59	60	60	61	63	63
x_{21}	x_{22}	x_{23}	x_{24}	x_{25}	x_{26}	x_{27}	x_{28}	x_{29}	x_{30}
63	63	63	64	64	64	65	65	68	68

Q_1
56

63
 Q_3

$Q_1 = 56$

$Q_3 = 63$

$D_5 = 59$ 50%
 $D_8 = 64$ 80%

$$Q_k = \frac{kn}{4}$$

$$Q_k = \frac{kn}{4}$$

$$Q_1 = \frac{1 \times 30}{4} = 7.5$$

$$Q_3 = \frac{3 \times 30}{4} = 22.5$$

$$\frac{56 + 56}{2} = 56$$

$$\frac{63 + 63}{2} = 63$$

Deell

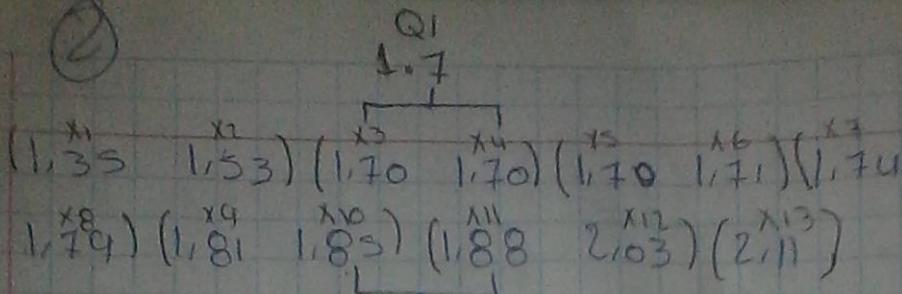
$$\frac{kn}{10} = \frac{5 \times 30}{10} = 15$$

$$\frac{kn}{10} = \frac{8 \times 30}{10} = 24$$

$$D_5 = 59 = 50\%$$

$$D_8 = 64 = 80\%$$

2



Q₁ $h \frac{(n+1)}{4}$ 1.86 Q_3 $1.70 + 1.70 = 1.7$

$$Q_1 = \frac{1(13+1)}{4}$$

$$Q = 3.5$$

$$Q_1 = 1.7$$

$$Q_3 = 1.86$$

$$D_2 = 1.53 \quad 20\%$$

$$D_7 = 1.81 \quad 70\%$$

Q₁ $h \frac{(n+1)}{4}$

$$\frac{1.85 + 1.88}{2} = 1.86$$

$$Q_3 = \frac{3(13+1)}{4}$$

$$Q = 10.5$$

Decil

$$\frac{K_n}{10} = \frac{2 \times 13}{10} = 2.6$$

$$D_2 = 1.53 = 20\%$$

$$\frac{K_n}{10} = \frac{7 \times 13}{10} = 9.1$$

$$D_7 = 1.81 = 70\%$$

3

X	f	F
44	9	9
45	13	22
49	16	38
53	12	50
54	11	61
55	8	69
56	6	75
57	5	80
Total	80	

$Q_3 = 54$
 $D_5 = 53 \quad 50\%$
 $D_7 = 54 \quad 70\%$
 $P_{45} = 49$
 $P_{73} = 54$

Q_k	D_k	P_k
$\frac{kn}{A}$	$\frac{kn}{10}$	$\frac{kn}{100}$
$Q_3 \quad \frac{3 \times 80}{4} = 60$	$D_5 \quad \frac{5 \times 80}{10} = 40$	$P_{45} = \frac{45 \times 80}{100} = 36$
$Q_3 = 54$	$D_5 = 53$	$P_{45} = 49$
	$D_7 \quad \frac{7 \times 80}{10} = 56$	$P_{73} \quad \frac{73 \times 80}{100} = 58$
	$D_7 = 54$	$P_{73} = 54$