

Dulce María Álvarez López 5 cuatrimestre
Ejercicio 1

8	7	6	9	9
10	8	6	9	8
9	9	6	7	9
7	8	7	7	6
7	10	10	9	7
6	10	10	10	7
10	9	9	10	9
7	7	9	8	10

$$\sum F_i = 64$$

$$\sum F_i = 68$$

$$\sum F_i = 63$$

$$\sum F_i = 69$$

$$\sum F_i = 65$$

$$\sum F_i^2 = 4096$$

$$\sum F_i^2 = 4624$$

$$\sum F_i^2 = 3969$$

$$\sum F_i^2 = 4761$$

$$\sum F_i^2 = 4225$$

$$\sum F_i = 329$$

$$\sum F_i^2 = 17,814$$

$$\text{Media } \bar{X} = \frac{\sum F_i}{N} = \bar{X} = \frac{329}{40} \quad \bar{X} = 8.22$$

6	6	6	6	6
7	7	7	7	7
7	7	7	7	7
8	8	8	8	<u>8</u>
<u>9</u>	9	9	9	9
9	9	9	9	9
9	10	10	10	10
10	10	10	10	10

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Mediana $\frac{n+1}{2}$

$$\bar{X} = 8 + 9 = \frac{17}{2} = 8.5 \quad \bar{X} = 8.5$$

Moda es el valor que más se repite en éste caso
es: Mo. 9

Varianza y desviación estándar

$$S^2 = \frac{\sum F_i^2}{n-1} - \left(\frac{\sum F_i}{n} \right)^2$$

$$\sum F_i = 329 \quad \sum F_i^2 = 17,814$$

$$17,814 - \left(\frac{329^2}{40} \right) = 15,107.9$$

$$\div 39 = 387.4$$

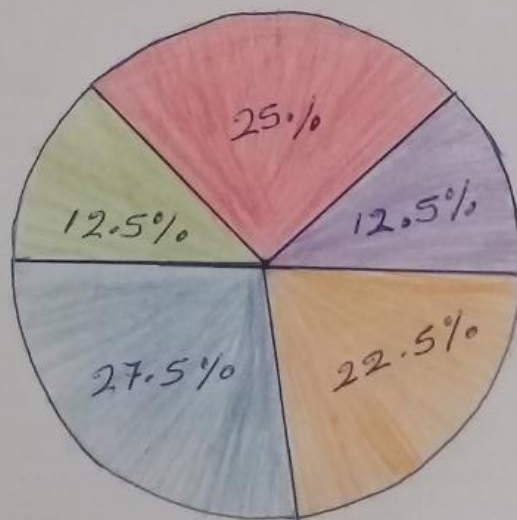
$$S = \sqrt{S^2} \quad S = \sqrt{387.4} \quad S = 19.7$$

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Tabla de frecuencia simple

X	f_i	f_i	f_r	f_r	%	grados
6	5	5	0.125	0.125	12.5%	45°
7	10	15	0.25	0.375	25%	90°
8	5	20	0.125	0.5	12.5%	45°
9	11	31	0.275	0.775	27.5%	99°
10	9	40	0.225	1	22.5%	81°
Totales	40		1		100%	360°

Gráfica de pastel.



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Ejercicio 2

15	12	11	11	10	15
12	10	11	12	15	12
10	10	10	10	15	11
15	15	10	11	10	10
10	10	12	12	10	12

$\sum F_1 = 62$ $\sum F_1 = 57$ $\sum F_1 = 54$ $\sum F_1 = 56$ $\sum F_1 = 60$ $\sum F_1 = 60$

$\sum F_1^2 = 3844$ $\sum F_1^2 = 3249$ $\sum F_1^2 = 2916$ $\sum F_1^2 = 3136$ $\sum F_1^2 = 3600$ $\sum F_1^2 = 3600$

$\sum F_1 = 349$ $\sum F_1^2 = 20345$

$\bar{X} = \frac{\sum F_1}{N}$ $\bar{X} = \frac{349}{30} = 11.63$ $\bar{X} = 11.63$
Media

10	10	10	10	10	10
10	10	10	10	10	10
11	11	<u>11</u>	<u>11</u>	11	12
12	12	12	12	12	12
15	15	15	15	15	15

Mediana $\frac{n}{2}$ $\frac{n+1}{2}$

$\bar{X} = 11 \times 11 = \frac{22}{2} = 11$ $\bar{X} = 11$

Moda es el valor que más se repite en éste caso es: $M_o = 10$

Varianza y desviación estándar

$$S^2 = \frac{\sum F_i^2 - \frac{(\sum F_i)^2}{n}}{n-1}$$

$$\sum F_i = 349 \quad \sum F_i^2 = 20,345$$

$$20,345 - \left(\frac{349^2}{30} \right) = 16,284.9$$

$$\frac{16,284.9}{29} = 561.6$$

$$S = \sqrt{S^2} \quad S = \sqrt{561.6} \quad S = 23.7$$

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Tabla de frecuencia simple

X	f_i	f_i	f_r	f_r	%	grados
10	12	12	0.4	0.4	40%	144°
11	5	17	0.17	0.57	17%	60°
12	7	24	0.23	0.8	23%	84°
15	6	30	0.2	1	20%	72°
			1			
Totales	30				100%	360°

Gráfica de pastel

