Luis Angel Espinoza Santiz

Recolección de datos de casos de violencia

Periodo	Registro	porcentaje	Grados
Enero	300	14.56	52.42
Febrero	150	7.28	26.21
Marzo	400	19.41	69.90
Abril	250	12.13	43.68
Mayo	300	14.56	52.42
Junio	200	9.70	34.95
Julio	180	8.73	31.45
Agosto	280	13.59	48.93
total	2.060	100%	360°

Enero $X=\frac{(300)(100)}{2060}=14.56\%$

$X=\frac{(300)(360)}{2060}=52.42°$

Febrero $X=\frac{(150)(100)}{2060}=7.28\%$

$X=\frac{(150)(360)}{2060}=26.21°$

Marzo $X=\frac{(400)(100)}{2060}=19.41\%$

$X=\frac{(400)(360)}{2060}=69.90°$

Abril $X=\frac{(250)(100)}{2060}=12.13\%$

$X=\frac{(250)(360)}{2060}=43.68°$

Mayo $X=\frac{(300)(100)}{2060}=14.56\%$

$X=\frac{(300)(360)}{2060}=52.42$

Junio $X=\frac{(200)(100)}{2060}=9.70\%$

$X=\frac{(200)(360)}{2060}=34.45$

Julio $X=\frac{(180)(100)}{2060}=8.73\%$ $X=\frac{(180)(360)}{2060}=31.45°$

Agosto $X=\frac{(280)(100)}{2060}=13.59\%$

$X=\frac{(280)(360)}{2060}=48.93°$

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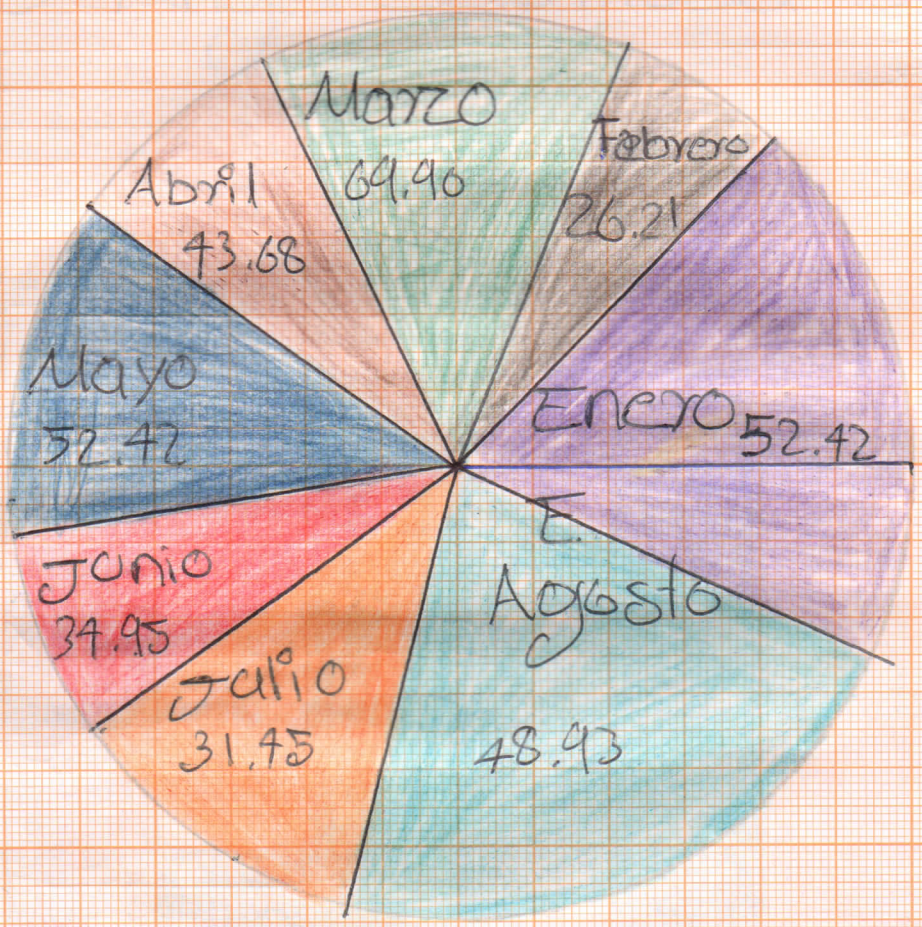
Grafica de pastel



Histograma

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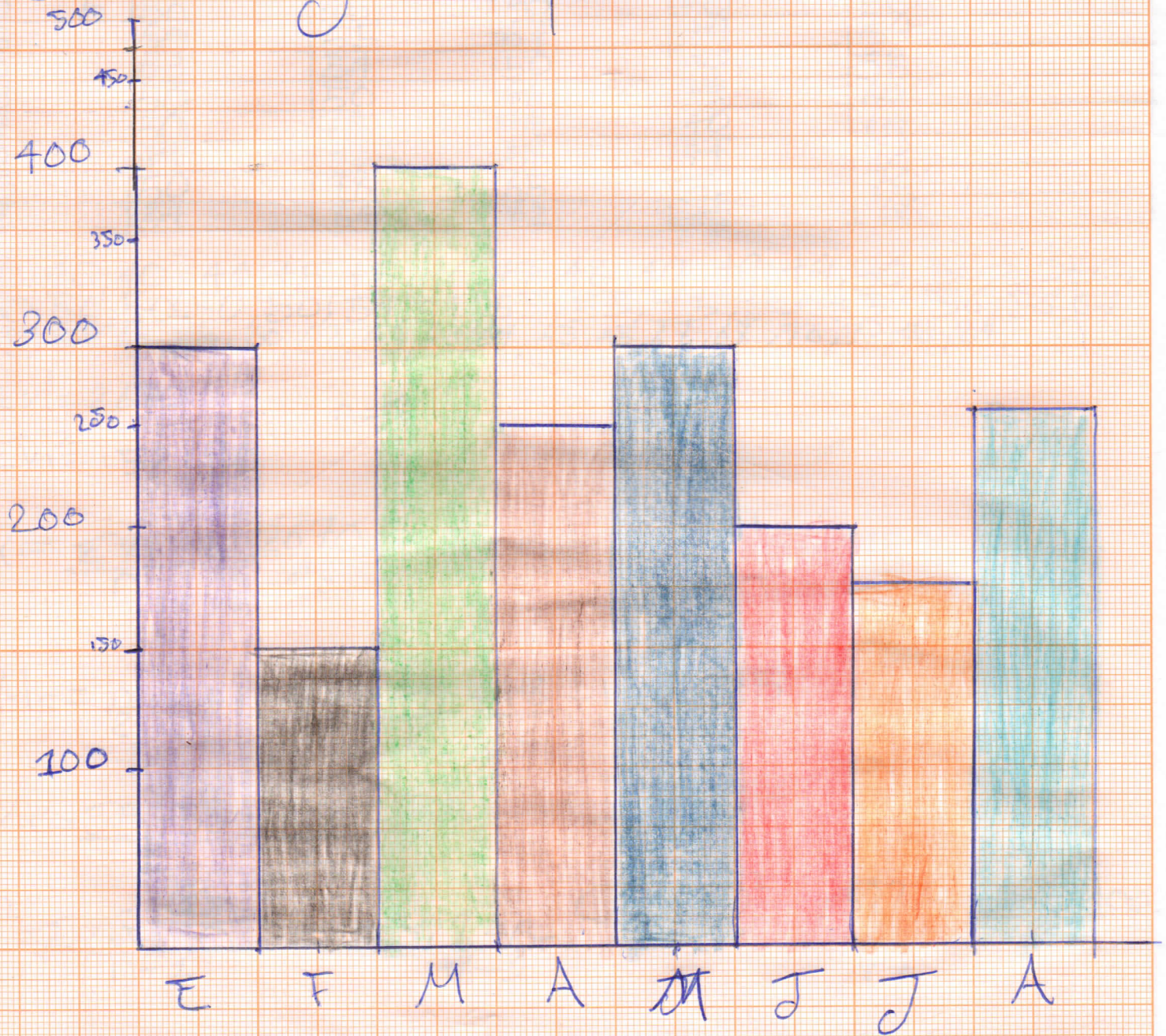

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Ejercicio 1

Realizar los cálculos de media, mediana, moda varianza, desviación estándar, para datos no agrupados.

40 5	56	45	56	50	50
55	60	55	67	49	59
60	63	54	50	55	58
63	50	50	46	48	60
47	50	65	49	40	64
40	49	62	58	44	72
55	50	78	65	50	70
50	54	84	62	45	68

40, 40, 40, 44, 45, 45, 46, 47, 48, 49, 49, 49, 50, 50, 50, 50, 50, 50, 50, 50, 50, 54, 54, 55, 55, 55, 55, 55, 56, 56, 58, 58, 59, 60, 60, 60, 62, 63, 63, 64, 65, 65, 67, 68, 70, 72, 78, 84.

$\Sigma y_i = 2670$ $\quad n = 48$

$\Sigma y_i^2 = 152890$

$$\bar{X} = \frac{\Sigma y_i}{n} = \frac{2670}{48} = 55.625 \qquad M_o = 50$$

$$Mc = \frac{n}{2} + \frac{n}{2} + 1 \qquad Me = \frac{48}{2} + \frac{48}{2} + 1 = 24,25$$

$$Me = \frac{55 + 55}{2} = \frac{110}{2} = 55$$

$$S^2 = \frac{\Sigma y_i^2 - \frac{(\Sigma y_i)^2}{n}}{n-1} = \frac{152846 - \frac{(2670)^2}{48}}{48-1} = \frac{152840 - \frac{7128400}{48}}{47}$$

$$S^2 = \frac{152840 - 148518.75}{47} = \frac{4321.25}{47} \qquad S^2 = 91.941$$

$$S = \sqrt{91.941}$$

$$S = 9.58$$

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Ejercio 2

Realizar la siguientes calculos de media, mediana, moda, varianza, desviacion estandar, para datos no agrupados.

45	60	55	41	29	49
50	54	49	42	35	53
50	70	44	46	45	50
54	65	54	49	57	44
54	54	22	54	65	56
23	54	29	58	54	48

22, 23, 29, 29, 35, 41, 42, 44, 44, 45, 45, 46, 48, 49, 49, 49, 50, 50, 50, 53, 54, 54, 54, 54, 54, 54, 54, 54, 55, 56, 58, 60, 65, 65, 70

$\Sigma Y_1 = 1758$

$\Sigma Y_1^2 = 89938$

$\bar{X} = \frac{\Sigma Y_1}{n} = \frac{1758}{36} = 48.83$

$M_o = 54$

$S^2 = \frac{\Sigma Y_1^2 - \frac{(\Sigma Y_1)^2}{n}}{n-1}$

$M_e = \frac{n}{2} + \frac{n}{2}+1 = \frac{36}{2} + \frac{36}{2}+1$

$S^2 = \frac{89938 - \frac{3090564}{36}}{36-1}$

$M_e = 18, 19 + 1 = 36$

$M_e = \frac{50+50}{2} = \frac{100}{2} = 50$

$S^2 = \frac{89938 - \frac{3090564}{36}}{35-1}$

$S = \sqrt{116.828}$

$S^2 = \frac{89938 - 85849}{35}$

$S = 10.80$

$S^2 = \frac{4089}{35} = 116.828$