

Edith Daniela Guillén Gordillo

17, 34, 16, 34, 27, 32, 36, 26, 29, 15, 36, 18, 15, 38, 18, 37
 19, 35, 33, 24, 25, 17, 27, 30, 20, 17, 40, 34, 20, 27, 28, 36
 17, 30, 39, 22, 18, 24, 25, 25

$R = X_{max} - X_{min}$

$R = 40 - 15$

$R = 25$

$k = \text{Regla de Sturges}$

$k = 1 + 3.322 \log n$

$k = 1 + 3.322 \log 40$

$k = 6.15 \rightarrow 6 \text{ intervalos (redondeo)} = 7$

$R = \text{Rango} = 25$

$k = \text{Intervalos} = 7$

$A = \text{Amplitud} = 4$

$k = \frac{R}{A} = \frac{25}{4} = 6.25 \rightarrow 7$

Edades	V_i	F_i	F_r	F	%
15-19	17	10	0.25	10	25%
19-23	21	4	0.1	14	10%
23-27	25	7	0.175	21	17.5%
27-31	29	6	0.15	27	15%
31-35	33	5	0.125	32	12.5%
35-39	37	6	0.15	38	15%
39-43	41	2	0.05	40	5%
		40	1		

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Media Mediana y Moda/Datos agrupados en intervalos

$$\bar{x} = \frac{\sum x_i f_i}{N}$$

$$a_i = L_0 - L_i$$

$$\bar{x} = 26.8$$

$$Me = 25.66$$

$$Mo = 24.5$$

Edades	X_i	f_i	F_0	$X_i \cdot f_i$
15-19	17	10	10	170
19-23	21	4	14	84
23-27	25	7	21	175
27-31	29	6	27	174
31-35	33	5	32	165
35-39	37	6	38	222
39-43	41	2	40	82
		40		1072

$$\bar{x} = \frac{1072}{40} = 26.8$$

$$40/2 = 20$$

$$Me = L_1 + \frac{\frac{N}{2} - F_1}{f_i} \cdot a_i = 23 + \frac{20 - 14}{7} \cdot 4$$

$$= 23 + \frac{6}{7} \cdot 4 = 23 + \frac{24}{7} = 23 + 2.66 = 25.66$$

$$Mo = L_1 + \frac{f_i - f_{i-1}}{(f_i - f_{i-1}) + (f_{i+1} - f_i)} \cdot a_i = 23 + \frac{7 - 4}{(7 - 4) + (7 - 6)} \cdot 4$$

$$= 23 + \frac{3}{3+1} \cdot 4 = 23 + \frac{3}{4} \cdot 2 = 23 + \frac{6}{4} = 23 + 1.5 = 24.5$$