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Grado: Quinto ADMON

Curso: Estadística II

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Act. NO. 03 Calcule $\bar{X}$, S y V de las siguientes tablas

X	f	F _a	fX	Nf(x-x̄)	F(fx)	(x-x̄) ²	f·(x-x̄) ²
15	4	4	60	1.81	7.24	3.28	13.12
16	10	14	160	0.81	8.10	0.66	6.60
17	14	28	238	0.19	2.66	0.04	0.56
18	7	35	126	1.19	8.33	1.42	9.94
19	2	37	38	2.19	4.38	4.80	9.60

① Mediana

$$\bar{X} = 16.81$$

② Desviación Estándar

$$S = \sqrt{\frac{\sum f \cdot (x - \bar{x})^2}{N}}$$

$$S = \sqrt{\frac{39.82}{37}}$$

$$S = \sqrt{1.08}$$

$$S = 1.04$$

③ Varianza

$$V = \frac{S}{\bar{X}} \cdot 100$$

$$V = \frac{1.04}{16.81} \cdot 100$$

$$V = 0.06 \cdot 100$$

$$V = 6\%$$

Puntos Obtenidos en legislación Fiscal

X	f	fa	xs	fxs	(x-x̄)	f·d/1	d/2	f·d/2
61-70	5	5	65.5	327.50	17.5	87.5	306.25	1,531.25
71-80	10	15	75.5	755	7.5	75	56.25	562.50
81-90	15	30	85.5	1282.50	2.5	37.5	6.25	93.75
91-100	10	40	95.5	955	12.5	125	156.25	1,562.50
								3750

Media A.

$$\bar{X} = 83$$

Desviación E.

$$S = \sqrt{\frac{\sum f \cdot d/2}{N}}$$

$$S = \sqrt{\frac{3750}{40}}$$

$$S = \sqrt{93.75}$$

$$S = 9.68$$

Varianza.

$$V = \frac{S}{x} \cdot 100$$

$$V = \frac{9.68}{83}$$

$$V = 0.12 \cdot 100$$

$$V = 12\%$$