

Instituto Privado Rafael Arenal Martinez

Nombre

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Grado

Quinto ADMON

Curso

Estadística II

Catedrático:

Josue Estrada

Tabla estadística simple con edades de 37 personas

Ejercicio NO. 04: Calcular momentos de Orden $k=1$ hasta $k=5$ (agregar columnas)

X	f	$f \cdot X$	$d = X - 16.81$	f/d	$(X - \bar{X})^2$	$f(X - \bar{X})^2$	$(X - \bar{X})^3$	$f(X - \bar{X})^3$	$(X - \bar{X})^4$	$f(X - \bar{X})^4$
15	4	60	1.81	7.34	3.28	13.12	5.93	23.42	10.73	42.92
16	10	160	0.81	8.10	0.66	6.60	0.53	5.30	0.43	4.30
17	14	238	0.19	2.66	0.04	0.56	0.69	9.66	1.30	18.20
18	7	126	1.19	8.33	1.42	9.94	1.69	11.83	2	14
19	2	38	2.19	4.38	4.80	9.60	10.50	21	23	46
	37	622		30.71		39.82		71.51		125.42

$(X-\bar{X})^5$	$f \cdot (X-\bar{X})^5$
19.43	77.72
0.35	3.50
2.48	34.72
2.39	16.73
50.38	100.76

233.43

#1 Medio Arit.

$$\bar{x} = \frac{\sum f \cdot x}{N}$$

$$\bar{x} = \underline{16.81}$$

Desviacion M.

$$Dm = \frac{\sum f \cdot |d|}{N}$$

$$Dm = \underline{0.83}$$

Momentos

$$(2) M_2 = \frac{\sum f \cdot (x - \bar{x})^2}{N}$$

$$M_2 = 8$$

$$M_2 = \frac{39.82}{37}$$

$$M_2 = \underline{1.08}$$

$$(3) M_3 = \frac{\sum f \cdot (x - \bar{x})^3}{N}$$

$$M_3 = \frac{71.51}{37}$$

$$M_3 = \underline{1.93}$$

$$(4) M_4 = \frac{\sum f \cdot (x - \bar{x})^4}{N}$$

$$M_4 = \frac{125.42}{37}$$

$$M_4 = \underline{3.39}$$

$$(5) M_5 = \frac{\sum f \cdot (x - \bar{x})^5}{N}$$

$$M_5 = \frac{233.43}{37}$$

$$M_5 = \underline{6.31}$$