

UNIVERSIDAD DEL SURESTE

ALUMNO: ALBA JUDITH TORRES
TOVILLA

ASIGNATURA: ESTADISTICA

TRABAJO: EJERCICIOS DATOS NO
AGRUPADOS

GRADO: 1

GRUPO: "A"

COMITAN DE DOMINGUEZ, CHIAPAS
A 16 DE NOVIEMBRE DE 2021

Ejercicio 1

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

$$\sum F_i = 2,670$$

$$\sum F_i^2 = 152,840$$

$$n = 48$$

* media

$$\bar{x} = \frac{\sum F_i}{n}$$

$$\bar{x} = \frac{2,670}{48}$$

$$\bar{x} = 55.625$$

* mediana (Par)

$$me = \frac{n}{2}, \frac{n}{2} + 1$$

$$me = \frac{48}{2}, \frac{48}{2} + 1$$

$$me = 24, 25$$

Posición de la tabla

$$me = \frac{55 + 55}{2}$$

$$me = \frac{110}{2}$$

$$me = 55$$

* moda

$$mo = 50$$

* Varianza

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

$$s^2 = \frac{152,840 - \frac{(2,670)^2}{48}}{47}$$

$$s^2 = \frac{4,321.25}{47}$$

$$s^2 = 91.94$$

* Desviación estandar

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

$$s = \frac{\sqrt{152,840 - \frac{(2,670)^2}{48}}}{47}$$

$$s = \frac{\sqrt{4,321.25}}{47}$$

$$s = \sqrt{91.94}$$

$$s = 9.58$$

Ejercicio 2

27	40	44	35	34	57	35	38
35	87	35	44	44	55	87	45
40	35	60	78	35	78	35	56
78	44	66	76	55	54	88	67
35	35	76	89	80	86	44	77
44	40	82	35	66	94	35	78
56	85	35	70	77	90	80	35

27	35	35	44	55	67	78	86
34	35	38	44	56	70	78	87
35	35	40	44	56	76	78	87
35	35	40	44	57	76	80	88
35	35	40	45	60	77	80	89
35	35	44	54	66	77	82	90
35	35	44	55	66	78	85	94

$\sum F_i = 3,211$
 $\sum F_i^2 = 207,513$
 $n = 56$

* media

$$\bar{x} = \frac{\sum F_i}{n}$$

$$\bar{x} = \frac{3,211}{56}$$

$$\bar{x} = 57.33$$

* mediana (Por)

$$me = \frac{n}{2}, \frac{n}{2} + 1$$

$$me = \frac{56}{2}, \frac{56}{2} + 1$$

$me = 28, 29$ Posición de la tabla

$$me = \frac{55 + 55}{2}$$

$$me = \frac{110}{2}$$

$$me = 55$$

* moda

$$mo = 35$$

* Varianza

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

$$s^2 = \frac{207,513 - \frac{(3,211)^2}{56}}{55}$$

$$s^2 = \frac{23,396.55}{55}$$

$$s^2 = 425.39$$

* Desviación estandar

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

$$s = \frac{\sqrt{207,513 - \frac{(3,211)^2}{56}}}{55}$$

$$s = \frac{\sqrt{23,396.55}}{55}$$

$$s = \sqrt{425.39}$$

$$s = 20.62$$