



**Nombre de alumno: FRANCISCO JAVIER
ARGUELLO HERNANDEZ**

**Nombre del profesor: JORGE ENRIQUE
ALVOREZ**

**Nombre del trabajo: DATOS NO
AGRUPADOS**

Materia: BIOESTADISTICA

Grado: 4

Grupo: A

Comitán de Domínguez Chiapas a 16 de octubre del 2020.

EJERCICIO 1

| | | | | | |
|----|----|----|----|----|----|
| 40 | 56 | 75 | 56 | 50 | 50 |
| 55 | 60 | 55 | 67 | 47 | 57 |
| 60 | 63 | 54 | 50 | 35 | 58 |
| 63 | 50 | 50 | 46 | 48 | 60 |
| 77 | 50 | 65 | 49 | 40 | 67 |
| 40 | 77 | 62 | 38 | 44 | 72 |
| 55 | 50 | 78 | 65 | 50 | 70 |
| 50 | 54 | 84 | 62 | 73 | 68 |

Realice los cálculos de media, mediana,

modo, varianza, desviación estándar

Tara datos no agrupados

| | | | | | | | |
|----|----|----|----|----|----|----|----|
| 27 | 40 | 44 | 44 | 34 | 57 | 35 | 38 |
| 35 | 87 | 35 | 78 | 44 | 55 | 87 | 45 |
| 40 | 35 | 60 | 76 | 35 | 18 | 35 | 56 |
| 78 | 44 | 66 | 89 | 55 | 54 | 88 | 67 |
| 35 | 35 | 76 | 76 | 80 | 86 | 44 | 77 |
| 44 | 40 | 82 | 82 | 66 | 94 | 35 | 78 |
| 56 | 85 | 35 | 70 | 77 | 90 | 80 | 35 |

17 34 35 35 35 35 35 35 35 35 35 35 35 35 35 35 35 35 35 35
 38 40 40 40 41 41 44 44 44 44 44 44 44 44 44 44 44 44 44 44
 57 60 66 66 67 70 70 76 76 77 77 77 77 77 77 77 77 77 77 77
 80 82 85 85 86 87 87 88 88 88 88 88 88 88 88 88 88 88 88 88

Otteniendo media

$$\bar{x} = \frac{\sum x}{n} = \frac{3211}{56}$$

$$\bar{x} = 57.32$$

Otteniendo mediana

$$\begin{aligned}
 Mc &= \frac{n}{2} = \frac{56}{2} + 1 = 28 + 1 = 29 \quad Mc = 35,55 \\
 m &= \frac{36}{2} + \frac{36}{2} + 1 = 36 + 1 = 37 \quad Mc = 55 + 55 \\
 Mc &= 28,729 \quad m = 35
 \end{aligned}$$

Otteniendo la variancia

$$S^2 = \frac{\sum y^2 - \frac{(\sum y)^2}{n}}{n-1}$$

$$S^2 = \frac{207515 - \frac{(3211)^2}{56}}{55}$$

$$S^2 = \frac{207515 - 184116,44}{55}$$

$$S^2 = 425,39$$

Francisco Javier Arguello

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

$\sum y_i = 2670$
 $\sum y_i^2 = 152840$

Obteniendo la media

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

$\bar{x} = \frac{2670}{48}$

$\bar{x} = 55.62$

Obteniendo la mediana

$Mc = \frac{n}{2} \cdot \frac{1}{2} + 1$

$Mc =$

$\frac{48}{2} \cdot \frac{1}{2} + 1$ $Mc = 55.55$

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

$Mc = 24, 24 + 1$ $Mc = \frac{48}{2}$

$Mc = 24, 25$ $Mc = 55$

Obteniendo la

varianza

$S^2 = \frac{\sum y_i^2 - (\sum y_i)^2}{n}$

$S^2 = \frac{152840 - (2670)^2}{48}$

$S^2 = \frac{152840 - 7188900}{48}$

$S^2 = 11944$

Francisco Javier Argueta

11/9/2010