



**Nombre de alumna: Citlali Jazmín  
Catemaxca Escobedo**

**Nombre del profesor:**

**Nombre del trabajo:**

**Materia: Estadística I**

**Grado: 1ero**

**Grupo: "A"**

Comitán de Domínguez Chiapas a 15 de octubre del 2021.

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| 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 |

# EJERCICIO 1

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| 40 | 40 | 44 | 46 | 47 | 48 |
| 49 | 49 | 50 | 50 | 50 | 50 |
| 50 | 50 | 54 | 55 | 55 | 58 |
| 58 | 60 | 60 | 62 | 63 | 63 |
| 64 | 65 | 65 | 70 | 72 | 78 |

## MEDIA:

$$40+40+44+46+47+48+49+49+50+50+50+50+50+50+54+55+55+58+58+60+60+62+63+63+64+65+65+70+72+78=$$

$$\bar{x} = \frac{1665}{30} = 55.5$$

$$\bar{x} = 55.5$$

## MEDIANA:

$$54, 55 = 109$$

$$\frac{109}{2} = 54.5$$

$$Me = 54.5$$

## MODA:

50 ES EL VALOR QUE TIENE MAYOR FRECUENCIA.

JAZMIN CATEMAXCA

VARIANZA:

$$s^2 = \frac{\sum (x - \bar{x})^2}{n-1} = s^2 = \frac{\sum x}{n-1} = \bar{x} = \frac{1665}{30} = 55.5$$

$$s^2 = (40-55.5)^2 + (40-55.5)^2 + (44-55.5)^2 + (46-55.5)^2 + (47-55.5)^2 + (48-55.5)^2 + (49-55.5)^2 + (49-55.5)^2 + (50-55.5)^2 + (50-55.5)^2 + (50-55.5)^2 + (54-55.5)^2 + (55-55.5)^2 + (55-55.5)^2 + (58-55.5)^2 + (58-55.5)^2 + (60-55.5)^2 + (60-55.5)^2 + (62-55.5)^2 + (63-55.5)^2 + (63-55.5)^2 + (64-55.5)^2 + (65-55.5)^2 + (65-55.5)^2 + (70-55.5)^2 + (72-55.5)^2 + (78-55.5)^2$$

29

$$s^2 = \frac{2.5495}{29}$$

$$s^2 = 87.91$$

$$\begin{aligned} & 240.25 + 240.25 + 132.25 + 90.25 + 72.25 + \\ & 56.25 + 42.25 + 42.25 + 30.25 + 30.25 + 30.25 + \\ & 30.25 + 30.25 + 30.25 + 2.25 + 0.25 + 0.25 + 6.25 + \\ & 6.25 + 20.25 + 20.25 + 42.25 + 56.25 + 56.25 + \\ & 56.25 + 72.25 + 90.25 + 90.25 + 102.25 + 172.25 + 56.25 \end{aligned}$$

29

DESVIACIÓN ESTANDAR:

$$s^2 = 87.91$$

$$s = \sqrt{87.91}$$

$$s = 9.37$$

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| 35 | 44 | 44 | 55 | 87 | 45 |
| 60 | 78 | 35 | 78 | 35 | 36 |
| 66 | 76 | 55 | 54 | 88 | 67 |
| 76 | 89 | 80 | 86 | 44 | 77 |
| 82 | 35 | 66 | 94 | 35 | 78 |
| 35 | 70 | 77 | 90 | 80 | 35 |

# EJERCICIO 2

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| 35 | 35 | 35 | 35 | 35 | 35 |
| 35 | 44 | 44 | 44 | 45 | 54 |
| 55 | 55 | 56 | 60 | 66 | 66 |
| 67 | 70 | 76 | 76 | 77 | 77 |
| 78 | 78 | 78 | 80 | 80 | 82 |
| 86 | 87 | 88 | 89 | 90 | 94 |

**MEDIA:**

$$35 + 35 + 35 + 35 + 35 + 35 + 35 + 44 + 44 + 44 + 45 + 54 + 55 + 55 + 56 + 60 + 66 + 66 + 67 + 70 + 76 + 76 + 77 + 77 + 78 + 78 + 78 + 80 + 80 + 82 + 86 + 87 + 88 + 89 + 90 + 94 = 2287$$

$$\bar{X} = \frac{2287}{36} = 63.52 \quad \bar{X} = 63.52$$

**MEDIANA:**

$$66, 67 = 133 \quad \frac{133}{2} = 66.5 \quad Mo = 66.5$$

**MODA:**

$Mo = 35$  Es el valor con: MAYOR FRECUENCIA.

JAZMÍN CAEMAXCA.

## VARIANZA:

$$s^2 = \frac{\sum(x - \bar{x})^2}{n-1} = \frac{s^2 = \sum x^2}{n-1} = \frac{\bar{x} = 2287}{36} = 63.52$$

$$s^2 = (35-63.52)^2 + (35-63.52)^2 + (35-63.52)^2 + (35-63.52)^2 + (35-63.52)^2 + \\ (35-63.52)^2 + (35-63.52)^2 + (44-63.52)^2 + (44-63.52)^2 + (44-63.52)^2 + \\ (45-63.52)^2 + (54-63.52)^2 + (55-63.52)^2 + (55-63.52)^2 + (56-63.52)^2 + \\ (60-63.52)^2 + (66-63.52)^2 + (66-63.52)^2 + (67-63.52)^2 + (70-63.52)^2 + \\ (76-63.52)^2 + (76-63.52)^2 + (77-63.52)^2 + (77-63.52)^2 + (78-63.52)^2 + \\ (78-63.52)^2 + (78-63.52)^2 + (80-63.52)^2 + (80-63.52)^2 + (82-63.52)^2 + \\ (86-63.52)^2 + (87-63.52)^2 + (88-63.52)^2 + (89-63.52)^2 + (90-63.52)^2 + \\ (94-63.52)^2 =$$

---

35

$$s^2 = 813.39 + 813.39 + 813.39 + 813.39 + 813.39 + 813.39 + 813.39 + 813.39 + 381.03 + \\ 381.03 + 381.03 + 342.99 + 90.63 + 72.59 + 72.59 + 56.55 + 12.39 + 6.15 + 6.15 + \\ 12.11 + 41.99 + 155.75 + 155.75 + 181.71 + 181.71 + 209.67 + 209.67 + 209.67 + \\ 271.59 + 271.59 + 341.51 + 505.35 + 551.31 + 599.27 + 649.23 + 701.19 + 929.03$$

---

35

$$s^2 = \frac{13,680.96}{35} = 390.88$$

$$s^2 = 390.88$$

## DESVIACIÓN ESTÁNDAR:

$$s^2 = 390.88$$

$$s = \sqrt{390.88}$$

$$s = 19.77$$

JARMIN CATEMAXCA