



**Nombre de alumno: Gerardo Israel Morales Rubio**

**Nombre del profesor: JORGE ENRIQUE ALBORES AGUILAR**

**Nombre del trabajo: reporte**

**Materia: MATEMÁTICAS FINANCIERAS**

**Grado: 4**

**Grupo: A**

Comitán de Domínguez Chiapas a 19 de mayo de 2022

# Ejercicio 1

## Datos no agrupados

23	25	23	25	32	28	26
20	20	24	27	30	25	25
19	30	25	30	20	20	30
30	25	28	24	35	39	32
23	20	20	26	34	19	31
20	24	20	28	30	18	20
24	25	23	30	20	20	25

13-500tiembres-2022  
 (x1000)

18	20	23	24	25	29	30
19	20	23	25	25	30	31
19	20	23	25	26	30	32
20	20	23	25	26	30	32
20	20	24	25	27	30	34
20	20	24	25	28	30	34
20	20	24	25	28	30	35

136    140    164    174    105    209    228

$$\sum n_i = 1235$$

$$\sum P_i^* = 32145$$

$$\sum f_i = 1235$$

$$\sum \bar{f}_i^2 = 32145$$

$$n = 49$$

$$\bar{X} = \frac{\sum f_i}{n} = \frac{1235}{49} = 25.20$$

$$Me = \frac{n+1}{2} \text{ lugar}$$

$$\frac{n}{2}, \frac{n+1}{2} \text{ lugar}$$

$$\frac{48}{2}, \frac{48+1}{2} = \frac{48}{2}, \frac{49}{2} = 24, 24.5$$

$$\frac{49+1}{2} = 25 \quad Me = 25$$

$$Mo = 20 \quad \text{El que mas se repite.}$$

$$s^2 = \frac{\sum \bar{f}_i^2 - \frac{(\sum f_i)^2}{n}}{n-1}$$

$$s^2 = \frac{32145 - \frac{(1235)^2}{49}}{48}$$

Calculadora

$$32145 - \frac{(1235)^2}{49} = \div 48 = 21.20$$

$$s = 4.60$$

23	26	28	32	20	30
20	20	30	30	30	30
25	33	33	20	20	30
30	30	30	24	30	20
28	20	20	26	32	20

20	20	24	28	30	30
20	20	25	30	30	32
20	20	26	30	30	32
20	20	26	30	30	33
20	23	28	30	30	33

$9 - 20 = 180$   
 23 - 1      23  
 24 - 1      24  
 25 - 1      25  
 26 - 2      52  
 28 - 2      56  
 30 - 10     300  
 32 - 2      64  
 33 - 2      66 7

$\bar{x} = \frac{\sum f_i}{n} = \frac{28 + 28}{30} = \frac{56}{30} = 28$   
 $\sum f_i = 790$   
 $\sum f_i^2 = 21934$   
 $n = 30$

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

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

$$\sum f_i = 790$$

$$\sum f_i^2 = 21476$$

$$n = 30$$

$$s^2 = \frac{21476 - \frac{(790)^2}{30}}{29}$$

$$21476 - (790^2 \div 30) = \div 29 = \underline{23.1935}$$

$$s = 4.81$$

~~20-September 2022~~  
~~X1000~~

45	45	48
50	48	34
48	48	38
49	47	42
50	37	40
35	30	48
40	38	50
45	40	48
48	48	48
48	50	49

900	2,025	2,304
1,156	2,025	2,304
1,225	2,025	2,304
1,369	2,209	2,308
1,444	2,304	2,401
1,444	2,304	2,401
1,600	2,304	2,500
1,600	2,304	2,500
1,600	2,304	2,500
1,764	2,304	2,500
<u>14,102</u>	<u>22,108</u>	<u>24,018</u>

$$= 60,228$$

Ordenadas

30	45	48
34	45	48
35	45	48
37	47	48
38	48	49
38	48	49
40	48	50
40	48	50
40	48	50
42	48	50

$$\sum f_i = 1334$$

$$\sum f_i = 60,228$$

$$n = 30$$

$$\bar{X} = \frac{\sum f_i}{n} = \frac{1334}{30} = 44,467$$

$$= 1,354$$

$$n_c = \frac{30 \cdot 30}{2} + 1 = 15,16 + \frac{48}{48} = 16$$

$$\text{Moda} = 48$$

$$s^2 = \frac{60,228 - \frac{(1334)^2}{30}}{29} = 31,36$$

$$s = \sqrt{31,36} = 5,6$$

23 de noviembre 2022

70000