

NOMBRE DE LA ALUMNA:

**Aurora Isabel Gómez Santis.**

NOMBRE DEL PROFESOR:

**Jorge Enrique Albores.**

MATERIA:

**Probabilidad y estadística.**

SEMESTRE: **5to**

TRABAJO: **3**

FECHA DE ENTREGA:

**16 de octubre del 2021**

Aurora Isabel Gómez Santis.  
 1. Ejercicio: 33000

8	7	6	9	9	
10	8	6	7	8	
7	8	7	7	6	
6	10	10	9	7	
10	10	10	10	7	
7	9	9	8	9	
			10	10	
64	68	63	69	65	Total: 329
528	588	519	605	541	Total: 2,781

$n = 40$

$\sum f_i = 329$   
 $\sum f_i^2 = 2,781$

$\bar{x} = \frac{\sum f_i}{n} = \frac{329}{40}$

$\bar{x} = 8.225$

MEDIA: 8.225

6	7	9	10
6	7	9	10
6	7	9	10
6	8	9	10
7	8	9	10
7	8	9	10
7	8	9	10
7	9	10	10
7	9	10	10
7	9	10	10

- 6 = 5
- 7 = 10
- 8 = 5
- 9 = 11
- 10 = 9

MODA: 9

Aurora Isabel Gómez Santis

$$\frac{n}{2}, \frac{n}{2} + 1 \quad 8 + 9 = 17$$

$$\frac{40}{2}, \frac{40}{2} + 1 \quad \frac{17}{2} = 8.5$$

20, 21

MEDIANA: 8.5

8, 9

$$\begin{aligned} \sum f_i &= 329 \\ \sum f_i^2 &= 2,781 \end{aligned}$$

$$n = 40$$

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

VARIANZA:  
1.922

$$s^2 = \frac{2,781 - \frac{(329)^2}{40}}{39}$$

$$2,781 - (329^2 \div 40) = 74.975$$

$$\frac{74.975}{39} = 1.922$$

acer

### 1. Tabla de Frecuencia.

Criterios	"fi"	"Fi"	"fr"	"Fr"	Porcenta- de %
6	5	5	0.125	0.125	12.5%
7	10	15	0.25	0.375	25%
8	15	20	0.125	0.5	12.5%
9	11	31	0.275	0.775	27.5%
10	9	40	0.225	1	22.5%
Totales:	40		1		100%

Aurora Isabel Gómez Santis.



Aurora Isabel Gómez Santis  
 2do. Ejercicio.

15	12	11	11	10	15	Total = 349
12	10	11	12	15	12	
10	10	10	10	15	11	
15	15	10	11	10	10	
10	10	12	12	10	12	
62	57	54	56	60	60	Total = 4,163
794	669	586	630	750	734	

$\sum f_i = 349$   
 $\sum f_i^2 = 4,163$   
 $n = 30$

$\bar{x} = \frac{\sum f_i}{n}$   
 $\bar{x} = \frac{349}{30} = 11.63$

MEDIA: 11.63

10	11	15
10	11	15
10	11	
10	12	
10	12	
10	12	
10	12	
10	12	
10	12	
10	15	
10	15	
11	15	
11	15	

- 10 = 12
- 11 = 5
- 12 = 7
- 15 = 6

MODA: 10

Aurora Isabel  
Gómez Santis.

MEDIANA: 15.5

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

$$Me = \frac{30+1}{2} = \frac{31}{2} = 15.5$$

$$\sum f_i = 349$$

$$\sum f_i^2 = 4,163$$

VARIANZA:

3.55

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

$$s^2 = \frac{4,163 - \frac{(349)^2}{30}}{29}$$

$$4,163 - \frac{(349)^2}{30} = 102.96$$

$$\frac{102.96}{29} = 3.55$$

2. Tabla de Frecuencia.

Criterios	"Fi"	"Fi"	"Fr"	"Fr"	%
10	12	12	0.4	0.4	40%
11	5	17	0.16	0.56	16%
12	7	24	0.23	0.79	23%
15	6	30	0.2	0.99	20%
Totales	30		0.99		99%

Aurora Isabel Gómez Santis.



