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Nombre del tema: Ejercicios

Modulo II actividad 2

Nombre de la Materia: Estadística

Nombre del profesor: Jorge Enrique Albores Aguilar

Nombre de la licenciatura: Psicología

Cuatrimestre: I

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Ejercicios

Yazmin Guillen Pérez

Ejercicio 1

Tabla ordenada

| | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|
| 46 | 56 | 45 | 56 | 50 | 50 | 40 | 48 | 50 | 55 | 60 | 65 |
| 55 | 60 | 55 | 67 | 49 | 59 | 40 | 49 | 50 | 55 | 66 | 65 |
| 60 | 63 | 54 | 50 | 55 | 58 | 46 | 49 | 50 | 55 | 66 | 67 |
| 63 | 50 | 50 | 46 | 48 | 60 | 44 | 49 | 50 | 56 | 62 | 68 |
| 47 | 50 | 65 | 49 | 40 | 64 | 45 | 50 | 50 | 56 | 62 | 70 |
| 46 | 49 | 62 | 58 | 44 | 72 | 45 | 50 | 54 | 58 | 63 | 72 |
| 55 | 50 | 78 | 65 | 50 | 70 | 46 | 50 | 54 | 58 | 63 | 78 |
| 50 | 54 | 84 | 62 | 45 | 68 | 47 | 50 | 55 | 59 | 64 | 84 |

Datos

$$\sum f_i = 2,670$$

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

$$n = 48$$

Media

$$\bar{x} = \frac{\sum f_i}{n} \quad \bar{x} = \frac{2670}{48} = 55.62$$

Mediana

$$\frac{n}{2}, \frac{n}{2} + 1 \text{ (par)}$$

$$\frac{48}{2}, \frac{48}{2} + 1 \quad \frac{55 + 55}{2} = \frac{110}{2} = 55$$

Moda

$$24, 25$$

$$MO = 50$$

Varianza

$$s^2 = 152,840 - \frac{(2,670)^2}{48} = 91,94$$

Desviación

$$47$$

$$\text{estandar } s = 9.58$$

Yazmin Guillén Pérez

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 |

Tabla ordenada

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

Pazmin Guillén Pérez

Datos

$$\sum f_i = 3,211$$

$$\sum f_i^2 = 206,762$$

$$n = 56$$

Media

$$\bar{x} = \frac{\sum f_i}{n} \quad \bar{x} = \frac{3211}{56} = 57.33$$

Mediana

$$\frac{n}{2}, \frac{n}{2} + 1 \text{ (Par)}$$

$$\frac{56}{2}, \frac{56}{2} + 1 \quad \frac{55 + 55}{2} = \frac{110}{2}$$

$$28, 29$$

$$= 55$$

Moda

$$MO = 35$$

Varianza

$$s^2 = \frac{206,762 - \frac{(3,211)^2}{56}}{55} = 411.7$$

Desviación estándar

$$s = 20.2$$