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Nombre del trabajo: Ejercicios

PASIÓN POR EDUCAR

Materia: Estadística Descriptiva en Nutrición

Grado: 3°

Grupo: NUTRICION

En un Hospital se tomaron 28 muestras
 A Pacientes que ingresaron a consulta
 Los cuales arrojó los siguientes
 Resultados.

| | | | |
|----|----|----|----|
| 60 | 68 | 60 | 63 |
| 65 | 80 | 95 | 69 |
| 70 | 70 | 62 | 74 |
| 95 | 86 | 60 | 91 |
| 90 | 83 | 95 | 88 |
| 95 | 95 | 60 | 75 |
| 80 | 80 | 95 | 95 |

$$\text{Rango} = \frac{\text{No. Mayor} - \text{No. Menor}}{\text{No. Intervalos}}$$

$$\text{Rango} = \frac{95 - 60}{8} = 7$$

| Intervalo | F ⁱ | % F ⁱ | F ^{ia} | % F ^{ia} | \bar{x}^i | F ⁱ \bar{x}^i | \bar{x}^{i2} | F ⁱ \bar{x}^{i2} |
|-----------|-------------------|------------------|-----------------|-------------------|-------------|-------------------------------|----------------|-------------------------------------|
| 60-67 | 7 | 25 | 7 | 25 | 63.5 | 444.5 | 4032.25 | 28225.75 |
| 67-74 | 4 | 14.28 | 11 | 39.2 | 70.5 | 282 | 4970.25 | 19881 |
| 74-81 | 5 | 17.85 | 16 | 57.14 | 77.5 | 387.5 | 6006.25 | 30031.25 |
| 81-88 | 2 | 7.14 | 18 | 64.28 | 84.5 | 169 | 7140.25 | 14280.5 |
| 88-95 | 10 | 35.71 | 28 | 100 | 91.5 | 915 | 8372.25 | 83722.5 |
| | $\Sigma F_i = 28$ | | | | | $\Sigma F_i \bar{x}^i = 2198$ | | $\Sigma F_i \bar{x}^{i2} = 176,141$ |

Media:

$$\bar{x} = \frac{\Sigma F_i \bar{x}^i}{n} = \frac{2198}{28} = \underline{\underline{78.5}}$$

Mediana:

$$Me = L_i + \frac{\frac{n}{2} - F_i}{F_i} \cdot a_i$$

$$\frac{n}{2} = \frac{28}{2} = 14$$

$$Me = \frac{74 + 14 - 11}{5} \cdot 7$$

$$Me = 78.2$$

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Moda

$$Mo = \frac{Li + Fi - Fi - 7}{Fi - Fi - 7 + Fi - Fi + 7} \cdot ai$$

$$Mo = \frac{88 + 10 - 2}{(10 - 2) + (70 - 0)} \cdot 7 = \underline{\underline{91.1}}$$

Varianza

$$S^2 = \frac{\sum Fi \cdot \bar{xi}^2 - \frac{(\sum Fi \cdot \bar{xi})^2}{n}}{n-1}$$

$$S^2 = \frac{176,141 - \frac{(2198)^2}{28}}{27} = \underline{\underline{133.25}}$$

Desviación Estandar.

$$S = 11.54$$

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