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Nombre del profesor: Jorge Enrique Albores

Nombre del trabajo: Valores media, mediana, moda, varianza y desviación.

Materia: Estadística Descriptiva en Nutrición

Grado: 3 Cuatrimestre

Comitán de Domínguez Chiapas a 15 de junio de 2020.

De los siguientes datos calcula:

* Media ✓ → 52.13
* Mediana ✓ → 52
* Moda ✓ → 40
* Varianza ✓ → 119.86
* Desviación estandar. ✓ → 10.94

40 ✓	40 ✓	41 ✓	44 ✓	43 ✓
52 ✓	35 ✓	39 ✓	59 ✓	45 ✓
60 ✓	48 ✓	53 ✓	58 ✓	55 ✓
43 ✓	40 ✓	60 ✓	67 ✓	69 ✓
40 ✓	52 ✓	64 ✓	54 ✓	70 ✓
41 ✓	48 ✓	65 ✓	66 ✓	73 ✓

x_1 x_2 x_3 x_4 x_5 x_6 x_7 x_8 x_9 x_{10} x_{11}

35, 39, 40, 40, 40, 40, 41, 41, 43, 43, 44

x_{12} x_{13} x_{14} x_{15} x_{16} x_{17} x_{18} x_{19} x_{20} x_{21} x_{22} x_{23}

45, 48, 48, 52, 52, 53, 54, 55, 58, 59, 60, 60

x_{24} x_{25} x_{26} x_{27} x_{28} x_{29} x_{30}

64, 65, 66, 67, 69, 70, 73

Media aritmetica (promedio): $\bar{x} = \frac{\sum x_i}{N}$

$\bar{x} = \frac{1564}{30}$ $\bar{x} = 52.13$

$Me = 52$

$Mo = 40$

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Varianza.

$$\sigma^2 = \frac{\Sigma(x_i - \bar{x})^2}{N}$$

$$\sigma^2 = \frac{\begin{array}{l}(35-52.13)^2 + (39-52.13)^2 + (40-52.13)^2 + (40-52.13)^2 + (40-52.13)^2 \\ + (40-52.13)^2 + (41-52.13)^2 + (41-52.13)^2 + \\ (43-52.13)^2 + (43-52.13)^2 + (44-52.13)^2 + (45-52.13)^2 + (48-52.13)^2 + (48-52.13)^2 + \\ (52-52.13)^2 + (52-52.13)^2 + (53-52.13)^2 + (54-52.13)^2 + (55-52.13)^2 + (58-52.13)^2 + \\ (59-52.13)^2 + (60-52.13)^2 + (60-52.13)^2 + (64-52.13)^2 + (65-52.13)^2 + \\ (66-52.13)^2 + (67-52.13)^2 + (69-52.13)^2 + (70-52.13)^2 + (73-52.13)^2\end{array}}{30}$$

$$\sigma^2 = \frac{\begin{array}{l}(17.13)^2 + (13.13)^2 + (12.13)^2 + (12.13)^2 + (12.13)^2 + (12.13)^2 + (11.13)^2 + (11.13)^2 + \\ (9.17)^2 + (9.17)^2 + (8.13)^2 + (7.13)^2 + (4.13)^2 + (4.13)^2 + (0.13)^2 + (0.13)^2 + \\ (0.87)^2 + (1.87)^2 + (2.87)^2 + (5.87)^2 + (6.87)^2 + (7.87)^2 + (7.87)^2 + \\ (11.87)^2 + (12.87)^2 + (13.87)^2 + (14.87)^2 + (16.87)^2 + (17.87)^2 + (20.87)^2\end{array}}{30}$$

$$\sigma^2 = \frac{\begin{array}{l}293.43 + 172.39 + 147.13 + 147.13 + 147.13 + 147.13 + 123.87 + 123.87 + 84.08 + \\ 84.08 + 66.09 + 50.83 + 17.05 + 17.05 + 0.016 + 0.016 + 0.75 + 0.75 + \\ 8.23 + 34.45 + 47.19 + 61.93 + 61.93 + 140.89 + 165.63 + 192.37 + \\ 221.11 + 284.59 + 319.33 + 435.55\end{array}}{30}$$

$$\sigma^2 = \frac{3595.99}{30}$$

Varianza

$$\sigma^2 = 119.86$$ //

Desviación $\sigma = \sqrt{119.86}$

Desviación.
10.94 //

Esmeralda Monserrat Navarro Avendaño.