

8 Agosto 2022

Rango

$$R = \text{Máx}_x - \text{Min}_x$$

$$150 - 5 = 145 \text{ rango.}$$

Varianza

$$\begin{array}{r} 6,580.31 \\ 55 - 1,743.09 \\ \hline 17,282.59 \\ \hline 25,605.99 \end{array}$$

$$\sigma^2 = \frac{\sum_{i=1}^N (x_i - \bar{x})^2}{N}$$

$$1422.55$$

$$\sigma^2 = \frac{\sum_{i=1}^N (5 - 44.67)^2}{18} \dots$$

$$\sigma^2 = \frac{25,605.99}{18}$$

$$\sigma^2 = 1422.55$$

$$\begin{array}{r} 6,577.15 \\ 1,743.09 \\ \hline 17,282.59 \\ \hline 25,605.99 \end{array}$$

Varianza

$$\begin{aligned}
 & \frac{(5 - 44.67)^2}{18} + \frac{(8 - 44.67)^2}{18} + \frac{(12 - 44.67)^2}{18} + \\
 & \frac{(13 - 44.67)^2}{18} + \frac{(15 - 44.67)^2}{18} + \frac{(18 - 44.67)^2}{18} + \frac{(20 - 44.67)^2}{18} \\
 & + \frac{(20 - 44.67)^2}{18} + \frac{(25 - 44.67)^2}{18} + \frac{(39 - 44.67)^2}{18} + \frac{(45 - 44.67)^2}{18} \\
 & + \frac{(55 - 44.67)^2}{18} + \frac{(56 - 44.67)^2}{18} + \frac{(59 - 44.67)^2}{18} + \\
 & \frac{(78 - 44.67)^2}{18} + \frac{(87 - 44.67)^2}{18} + \frac{(99 - 44.67)^2}{18} + \\
 & \frac{(150 - 44.67)^2}{18}
 \end{aligned}$$

$$S = \frac{25,605.99}{18}$$

$$S = 1422.55$$

Desviación Típica

$$\begin{aligned}
 & \sqrt{\frac{-5 - 44.67}{18}} + \sqrt{\frac{8 - 44.67}{18}} + \sqrt{\frac{12 - 44.67}{18}} + \\
 & \sqrt{\frac{13 - 44.67}{18}} + \sqrt{\frac{15 - 44.67}{18}} + \sqrt{\frac{18 - 44.67}{18}} + \\
 & \sqrt{\frac{20 - 44.67}{18}} + \sqrt{\frac{20 - 44.67}{18}} + \sqrt{\frac{25 - 44.67}{18}} + \\
 & \sqrt{\frac{39 - 44.67}{18}} + \sqrt{\frac{45 - 44.67}{18}} + \sqrt{\frac{55 - 44.67}{18}} + \\
 & \sqrt{\frac{56 - 44.67}{18}} + \sqrt{\frac{59 - 44.67}{18}} + \sqrt{\frac{78 - 44.67}{18}} + \\
 & \sqrt{\frac{87 - 44.67}{18}} + \sqrt{\frac{99 - 44.67}{18}} + \sqrt{\frac{150 - 44.67}{18}}
 \end{aligned}$$

$$\sigma = 89.28$$

$$\sigma = \sqrt{\frac{89.28}{18}}$$

$$\sigma = \sqrt{4.96}$$

$$\sigma = 2.22$$

Desviación Típica

$$\sigma = \sqrt{\frac{\sum_{i=1}^N (x_i - \bar{x})^2}{N}}$$

$$-197.02$$

$$136.65$$

$$249.65$$

$$189.28$$

$$18$$

$$4.96$$

$$2.22$$

$$\sigma = \sqrt{\frac{(5 - 44.67)^2}{18}}$$

$$\sigma = \sqrt{\frac{89.28}{18}}$$

$$\sigma = \sqrt{4.96} = 2.22$$

Coeficiente de Variación

$$CV = \frac{\sigma_x}{1x1}$$

$$CV = \frac{2.22}{44.67}$$

$$CV = 0.04$$