

1._ calcula: promedio, mediana, moda, rango, varianza y desviación estándar de las siguientes calificaciones:

7, 8, 9, 9, 10, 9, 8, 7.

Mediana: **7, 7, 8, 8, 9, 9, 9, 10**

$$= \frac{67}{8} = \mathbf{8.3}$$

Mediana: **7, 7, 8, 8, 9, 9, 9, 10**

Mediana: **8.5**

Rango: **7 - 10 = 3**

$$(S)^2: (7 - 8.5)^2 + (7 - 8.5)^2 + (8 - 8.5)^2 + (8 - 8.5)^2 + (9 - 8.5)^2 + (9 - 8.5)^2 + (9 - 8.5)^2 + (10 - 8.5)^2$$

$$(S)^2 (-1.5)^2$$

$$(-1.5)^2 + (-1.5)^2 + (-0.5)^2 + (-0.5)^2 + (0.5)^2 + (0.5)^2 + (0.5)^2 + (1.5)^2$$

$$2.25 + 2.25 + 0.25 + 0.25 + 0.25 + 0.25 + 0.25 + 2.25 = \frac{7}{8} = \mathbf{0.875}$$

↓

$$\mathbf{87.5 \%}$$

2._ Una urna tiene 8 bolas rojas, cinco amarillas y siete verdes, si extrae una bola aleatoriamente, determinar la probabilidad de que sea:

- A) Roja B) Amarilla C) Verde

$$8 \text{ (Rojas)} + 5 \text{ (Amarillas)} + 7 \text{ (Verde)} = 20$$

$$\begin{aligned} \text{Roja} \\ = 8 / 20 \\ = 0.4 \\ = 40\% \end{aligned}$$

$$\begin{aligned} \text{Amarilla} \\ = 5 / 20 \\ = 0.25 \\ = 25\% \end{aligned}$$

$$\begin{aligned} \text{Verde} \\ = 7 / 20 \\ = 0.35 \\ = 35\% \end{aligned}$$

$$\text{Roja} = 40 \%$$

$$\text{Amarilla} = 25 \%$$

$$\text{Verde} = 35\%$$