

Tarefa básica - Probabilidade

$$1. \quad p = \frac{10}{20} = \frac{9}{19} \quad p = \frac{9}{38}$$

Resposta: alternativa A

$$2. \quad p = \frac{3}{6} = \frac{1}{2} \quad \text{ou } 50\%$$

Resposta: alternativa D

$$3. \quad \begin{array}{rcl} 1000 & \text{---} & 100 \\ x & \text{---} & 17 \end{array} \quad \begin{array}{l} 1000 \cdot 17 = 100x \\ 17000 = 100x \\ x = 17000 \end{array}$$

$\frac{100}{170} \mid x = 170 \mid$ a percentagem entre 1000 pessoas

$$\begin{array}{rcl} 170 & \text{---} & 100 \\ x & \text{---} & 44 \end{array} \quad \begin{array}{l} 170 \cdot 44 = 100x \\ 7480 = 100x \\ x = 74,80 \end{array}$$

$\frac{100}{74,8} \mid x = 74,8 \mid$ a percentagem que percentagem

$$\begin{array}{rcl} 1000 & \text{---} & 100 \\ 75 & \text{---} & x \end{array} \quad \begin{array}{l} 1000x = 100 \cdot 75 \\ 1000x = 7500 \\ x = 7500 \end{array}$$

$\frac{1000}{75} \mid x = 7,5 \mid$

alternativa B

$$4. C_{12}^2 = \frac{12!}{2!(12-2)!} = \frac{12!}{2!10!} = \frac{12 \cdot 11 \cdot 10!}{2 \cdot 10!} = \frac{12 \cdot 11}{2} = 66$$

$$P(A) = \frac{5}{66} \text{ impares consecutivos} \quad P(A) = \frac{61}{66} \text{ não impares consecutivos}$$

alternativa: B

$$5. 99 = 3 + (n-1)3$$

$$99 = 3 + 3n - 3$$

$$3n = 99$$

$$n = \frac{99}{3}$$

$$n = 33$$

$$\frac{33^{13}}{99^{13}} = \frac{1}{3}$$

alternativa: B

$$6. P(A) = \frac{N(A)}{N(E)} \quad P(A) = \frac{6}{36} \quad P(A) = \frac{1}{6}$$

alternativa: C.