

Tarefa Bônus - Probabilidade I

01- $NE = \{1, 3, 5, 7, 9, 11, 13, 15, 17, 19\}$
 $Ns = \{1, 2, 3, \dots, 19, 20\}$

$$\frac{10}{20} \cdot \frac{9}{19} = \frac{1-9}{2-19} = \boxed{\frac{9}{38}}$$

Ar. por com. indep.

(A)

02- $NE = \{2, 4, 6\}$
 $Ns = \{1, 2, 3, 4, 5, 6\}$

$$\frac{3}{6} \text{ ou } \frac{1}{2}$$

$$\frac{N(E)}{N(S)}$$

(D)

03- $1000 - 100\%$ $170 - 100\%$ $N(E) = 75$
 $x - 17\%$ $x - 44\%$ $N(S) = 1000$

$$100x = 17000$$

$$x = \frac{17000}{100}$$

$$x = 170$$

$$100x = 7480$$

$$x = \frac{7480}{100}$$

$$x \approx 75$$

$$\frac{75}{1000} \text{ ou } 0,075$$

(B)

04- $NA = \{2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37\}$

$$C_2^{12} = \frac{12!}{2!(12-2)!} = \frac{12 \cdot 11 \cdot 10!}{2! \cdot 10!} = \frac{132}{2} = 66 \text{ permutações combinatórias}$$

$$N(E) = 66$$

Combinatórias ou impares = $\{(3, 5), (5, 7), (11, 13), (17, 19), (29, 31)\}$
 $N(A) = 5$

(B)

$$P(A) = \frac{N(A)}{N(E)} = \frac{5}{66}$$

05- $N(E) = \{3, 6, 9, 12, \dots, 96, 99\}$

Razão de 3 em 3, pode ser fator: $99 \div 3$

$N(E) = 33$	33	ou	$\begin{bmatrix} 1 \\ 3 \end{bmatrix}$
$N(S) = 99$	99		

$$\begin{array}{r} 99 \div 3 \\ \underline{-9} \\ 09 \\ \underline{-9} \\ 00 \end{array}$$

(B)

06- $\frac{6}{D1} \cdot \frac{1}{D2} = 6 \times 1 = 6$

São 2 dados, logo: $6 \times 2 = 12$ possíveis combinações

$N(E) = 12$

$N(A) = 2$ (dados)

$\frac{2}{12}$	ou	$\begin{bmatrix} 1 \\ 6 \end{bmatrix}$
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(C)