

Nome: Míkaela dos Santos Ferreira Prontuário: 1890336 CTII-348

PROBABILIDADE 1

EXERCÍCIOS 1, 2 e 3

01. (FUVEST)

2 -> números 1 a 20 -> Impar

$$N(B) = \{1, 3, 5, 7, 9, 11, 13, 15, 17, 19\}$$

$$C_{10,2} = \frac{10!}{2!8!} = \frac{10 \cdot 9 \cdot 8!}{8! \cdot 2 \cdot 1} = \frac{720}{16} = 45$$

$$C_{20,2} = \frac{20!}{2!18!} = \frac{20 \cdot 19 \cdot 18!}{18! \cdot 2 \cdot 1} = \frac{6840}{36} = 190$$

$$P(B) = \frac{45}{190} = \frac{9}{38} \quad \text{Resposta A}$$

02. (UEL)

$$\{2, 4, 6\}$$

$$N(P) = 3$$

$$P(P) = 3/6 = 1/2 \quad \text{Resposta D}$$

03. (VUNESP)

1000 = 17% Fuma -> 170 pessoas

44% mulheres -> 75 mulheres fumam

$$P(M) = 75/1000 = 0,075 \quad \text{Resposta B}$$

EXERCÍCIOS 4, 5, e 6

04. (MACK)

$$A = \{2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37\} = 12 \text{ números}$$

$$C_{12,2} = \frac{12!}{2!10!} = \frac{12 \cdot 11 \cdot 10!}{10! \cdot 2 \cdot 1} = \frac{1320}{20} = 66$$

$$N(A) = ? / 66$$

$$(3, 5), (5, 7), (11, 13), (17, 19), (29, 31)$$

$$N(A) = 5 / 66 // \text{ Resposta B}$$

05. (MACK)

$$99 / 3 = 33$$

$$N(A) = 33$$

$$P(A) = 33 / 99 = 1/3 // \text{ Resposta B}$$

06. (MACK)

$$(2, 5), (5, 2), (3, 4), (4, 3), (1, 6), (6, 1)$$

$$N(s) = 6 \cdot 6 = 36$$

$$P = 6 / 36 = 1/6 // \text{ Resposta C}$$