

Probabilidade I

01 - (FUVEST)

$$C(10, 2) = \frac{10 \cdot 9}{(1 \cdot 2) \cdot 2} = \frac{90}{2} = 45$$

$$C(20, 2) = \frac{20 \cdot 19}{(1 \cdot 2) \cdot 2} = \frac{380}{2} = 190$$

$$\frac{45}{190} = \frac{9}{38} \quad (A) //$$

02 - (UEL)

Possíveis: $(1, 2, 3, 4, 5, 6) \rightarrow n(S) = 6$ Pares: $(2, 4, 6) \rightarrow n(A) = 3$

$$P = \frac{n(A)}{n(S)} = \frac{3}{6} = \frac{1}{2} \quad (D)$$

03 - (VUNESP)

$$17\% \text{ de } 1000 = 170$$

$$44\% \text{ de } 170 = 74,8$$

$$P = \frac{1000}{75} \times \frac{100}{x}$$

$$1000x = 100 \cdot 75$$

$$1000x = 7500$$

$$x = \frac{7500}{1000} = 7,5 \quad (B)$$

04 - (MACK)

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

$$C(12, 2) = \frac{12!}{2!(12-2)!} = \frac{12!}{2! \cdot 10!} = \frac{12 \cdot 11 \cdot 10!}{2! \cdot 10!} = \frac{132}{2} = 66 \quad n(E) = 66$$

$$\{(3, 5), (5, 7), (11, 13), (17, 19), (29, 31)\} = 5 \text{ seqüências}$$

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

05 - (MACK)

$$1 \leq m \leq 99$$

$\{1, 2, 3, 4, 5, 6, 7, 8, 9\}$

$$P(A) = \frac{3^3}{9^3} = \frac{1}{3}$$

$n(A) = 3 \rightarrow$ de 1 a 9 tem 3 números
que não são divisíveis por 3.

06 - (MACK)

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

$$n(\Omega) = 6 \cdot 6 = 36$$

$$\frac{6}{36} = \frac{1}{6} \quad (C) //$$