

FICHAS 01 201a - Soluções (PROBABILIDADES E COMBINATÓRIA)

- ① A ② A ③ A ④ C ⑤ C ⑥ C ⑦ A
 ⑧ $2/5$ ⑨ a) 3628800 b) 103680 c) $1/15$
 ⑩ C ⑪ A ⑫ 0,134 ⑬ a) 166320 b) 0,006
 ⑭ A ⑮ A ⑯ $16/17$ ⑰ 4% ⑱ A ⑲ $15/34$
 ⑳ a) 0,0000079 b) $P(A \cap 1) = 0,125 \neq 0$ c) $12/91$
 ㉑ A ㉒ C ㉓ D ㉔ a) 35% b) 0,3
 ㉕ 0,06 ㉖ C ㉗ D ㉘ C ㉙ a) $1/9$
 ㉚ a) 1656 b) 10350 c) $13/23$
 ㉛ A ㉜ B ㉝ D ㉞ B ㉟ $7/12$ b) 64084800
 ㊱ B ㊲ D ㊳ a) 6% b) 0,006 ㊴ C ㊵ D ㊶ 0,336
 ㊷ $3/51$ ㊸ C ㊹ A ㊺ a) 604800 b) 2400
 ㊻ $6/7$ ㊼ A ㊽ C ㊾ a) 58% b) 44%
 ㊿ D ㉀ A ㉁ a) 48 b) 480 ㉂ C ㉃ A
 ㉄ b) $1/7$ ㉅ C ㉆ D ㉇ a) $1/3$ b) $25/216$ ㉈ D
 ㉉ C ㊱ a) $9/22$ b) $1/22$ ㊲ B ㊳ B ㊴ a) $7/22$ a) 16
 ㊵ C ㊶ B ㊷ a) 60 b) $1/11$ ㊸ 11 ㊹ A ㊺ D
 ㊻ a) $81/253$ b) $2/9$ ㊼ opção ㊽ A ㊾ C
 ㊿ a) São. ㉀ 0,68 ㉁ A ㉂ C ㉃ $16/49$ ㉄ b) $8/15$
 ㉅ B ㉆ C ㉇ C ㉈ a) 0,24 ㉉ D ㊱ D ㊲ C
 ㊳ b) 0,74 ㊴ 3 ㊵ A ㊶ D ㊷ B ㊸ 210
 ㊹ a) $10/19$ ㊺ D ㊻ C ㊼ C ㊽ a) 15840
 ㊾ B ㊿ C ㉀ B ㉁ a) $7/15$ b) 195671700 ㉂ C
 ㉃ B ㉄ D ㉅ b) $1/6$ ㉆ D ㉇ A ㉈ a) 0,25 b) 0,071
 ㉉ B ㊱ D ㊲ B ㊳ a) $1/4$ ㊴ B ㊵ D ㊶ C ㊷ a) $18/29$
 b) 0,41 ㊸ A ㊹ C ㊺ B ㊻ a) 0,064 ㊼ B ㊽ D ㊾ C
 ㊿ a) $2/11$ b) 25 ㉀ $1/2$ ㉁ B ㉂ C ㉃ $5/9$ ㉄ C ㉅ A
 ㉆ a) $16/21$ ㉇ $1/10$ ㉈ C ㉉ B ㊱ a) $1/3$ ㊲ B
 ㊳ C ㊴ C ㊵ a) $1/8$ ㊶ B ㊷ B

FICHA 016 - SOLUÇÕES - PROBABILIDADES E COMBINATÓRIA

(160) B (161) C (162) C (163) A (164) C

(165) B (166) A (167) C (168) B (169) C

(170) C (171) D (172) C (173) A (174) C

(175) C (176) B

(177) a) 38760 b) 25480 c) 189/1615

d) 0,00000011 e) 0,59

(178) a) 1000000 b) 567/6250 = 0,09072 c) 0,0011

(180) 0,884 (181) 27% (182) a) 54,75%

b1) 0,1725 b2) 0,7075 c) 0,433780

(183) a) 4/15 (184) a) 1/10 b1) 0,035 b2) 10

(185) 25/108 (186) a) 276 b1) 28% b2) 93%

(187) 9º termo → 126720 (188) a) 1484280 b) 0,11

Ficha 1.c

(189) 0,0002 (190) D (191) B (192) $\frac{1}{243}$ (193) C (194) 280 (195) A (196) C (197.a) $\frac{1}{2}$ (197.b) 9123840

(198) A (199) B (200) $\frac{3}{7}$ (201) $\frac{n-3}{n}$ (202) B (203.a) 0,54 (203.b) 0,001 (204) B (205.a) D (205.b) 40%

(206) 0,03 (207) D (208) C (209) $P(B \cap F) = \frac{1}{20} \neq 0$ (210.a) D (210.b) 0,003 (211) B (212) D (213) 0,03 (215) C

Ficha 1.d

(1) 120 (2.1) $\frac{n^2 + 4n + 6}{(n+2)!}$ (2.2) $2n^2$ (3.1) 1 (3.2) 4 (4.1) U (4.2) $\emptyset$ (4.3) $A \cup B$ (4.4) B (4.5) U (5) 720 (6) 623360743125120

(7) 48 (8) 924 (9.1) 1250000 (9.2) 3750000 (9.3) 78125 (9.4) 2126250 (9.5) 43750000 (10.1) 18 (10.2) 49 (10.3) 279 (11) 2916

(12.1) 11520 (12.2) 114244 (13.1) 2352 (13.2) 1344 (13.3) 336 (13.4) 1614 (14.1) 192 (14.2) 372 (14.3) 54

(15.1) 210 (15.2.1) 72 (15.2.2) 120 (16) 1440 (17) 384 (18) 30240 (19.1) 840 (19.2) 360 (20) 201180672000 (21) 19958400

(22) 10 (23.1) 56 (23.2) 30 (23.3) 55 (23.4) 50 (23.5) 26 (24) 1980 (25) 36 (26.1) 48 (26.2) 18 (26.3) 180

(26.3.2) * (27) 350 (28) 2 ou 7 (29) 924 (30) 1716 (31) 3003, 5005, 11440, 11440 (32.1) 330 (32.2) 16384

(33) $\frac{1}{243}x^5 - \frac{5}{81}x^6 + \frac{10}{27}x^7 - \frac{10}{9}x^8 + \frac{5}{3}x^9 - x^{10}$ (34.1) $-\frac{192}{x^2}$ (34.2) $-\frac{13608}{\sqrt{x^{11}}}$ (35.1) 60 (35.2) x^3 (36.1) 4096 (36.2) 0

(37) -1 (38.1) $\frac{3}{3125}$ (38.2) $\frac{1458}{78125}$ (38.3) $\frac{3439}{10000}$ (39.1.1) $\frac{5}{11}$ (39.1.2) $\frac{3}{11}$ (39.1.3) $\frac{2}{11}$ (39.2.1) $\frac{61}{121}$ (39.2.2) $\frac{60}{121}$ (39.2.3) $\frac{1}{11}$

(39.3.1) $\frac{2}{11}$ (39.3.2) $\frac{4}{11}$ (39.3.3) $\frac{2}{55}$ (40.1) $\frac{1}{27}$ (40.2) $\frac{17}{81}$ (40.3) $\frac{181}{216}$ (41.1) $\frac{1}{3}$ (41.2) $\frac{1}{3}$ (41.3) $\frac{2}{3}$ (42.1) $\frac{1}{2145}$ (42.2) $\frac{328}{2145}$

(42.3) $\frac{1}{2145}$ (43.1.1) $\frac{2}{7}$ (43.1.2) $\frac{1}{7}$ (43.2) $\frac{3}{7}$ (44.1) $\frac{1}{462}$ (44.2) $\frac{1}{924}$ (44.3) $\frac{2}{55}$ (45) $\frac{6}{11}$ (46) 0,8 e 0,8 (48) $\frac{7}{12}e^{\frac{2}{3}}$

(50.1) $\frac{3}{2}P(A) - \frac{13}{20}$ (50.2.1) $\frac{11}{20}$ (50.2.2) $\frac{7}{11}$ (51) Não $\left(P(A) = \frac{8}{17} e P(A|B) = \frac{1}{6} \right)$ (55.1.1) $\frac{5}{8}$ (55.1.2) $\frac{17}{56}$

(55.2.1) $\frac{5}{7}$ (55.2.2) $\frac{3}{7}$ (55.2.3) $\frac{9}{14}$ (55.2.4) $\frac{2}{5}$ (56.1) $\frac{10}{21}$ (56.2) $\frac{20}{21}$ (56.3) $\frac{1}{3}$ (57) $\frac{2}{5}$ (58) 10 (59.1) 0,02 (59.2) 0,375