

PROBABILIDADE

$$Q = \frac{n(A)}{n(\Omega)} = \frac{\text{QUANTO}}{\text{TUDO}}$$

$$n(\Omega) = \{1, 2, 3, 4, 5, 6\}$$

$$n(A) = \{6\} \text{ subconjunto}$$

$$Q = \frac{1}{6} = 16,6\%$$

PROBABILIDADE CONDICIONAL

• altera espaço amostral

$$P(A/B)$$

| | | |
|---|-----|-----------------|
| | EXT | 3 ^{to} |
| H | 30 | 40 |
| M | 20 | 60 |

$$P(3/M) = \frac{60}{80} = 75\%$$

$$P(H/3) = \frac{40}{100} = 40\%$$

UFSC: 1 - 260 quantos são divisíveis por 7

$$TUDO = 260$$

$$QUANTO = \{7, 14, \dots, 259\} \frac{260}{7} \approx 37$$

$$R = \frac{37}{260}$$

FILHOS

| | | |
|---|---|---|
| | ♀ | ♂ |
| 1 | 1 | 1 |
| 2 | 1 | 2 |

x N° de casos

$$P(GGB) = \frac{1}{2^3} = \frac{1}{8}$$

ENEM:

| | | | | | |
|---|---|---|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 2 | 3 | 4 | 5 | 6 | 7 |
| 3 | 4 | 5 | 6 | 7 | 8 |
| 4 | 5 | 6 | 7 | 8 | 9 |
| 5 | 6 | 7 | 8 | 9 | 10 |
| 6 | 7 | 8 | 9 | 10 | 11 |
| 7 | 8 | 9 | 10 | 11 | 12 |

$$\text{CHANCE DE SOMAR 7: } \frac{6}{36} = \frac{1}{6}$$

$$P(6600) = \frac{1}{2^9} = \frac{1}{512} \approx 0,2\%$$

$$\text{CHANCE DE SOMAR 10: } \frac{3}{36} = \frac{1}{12}$$

DIAGRAMA DE ARVORE

- 1 Identificar eventos e probabilidades
- 2 Supor número de amostras
- 3 lembrar que é 2x% de 4%

PROBABILIDADES COMPLEMENTARES

$$P(C) = 30\%$$

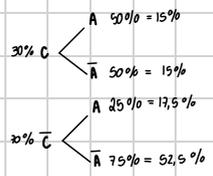
$$P(\bar{C}) = 70\%$$

$$P(C) + P(\bar{C}) = 100\%$$

Obs: $P(\text{ao menos 1}) = 1 - P(\text{nenhum})$

$$P(\text{ao menos 1}) + P(\text{nenhum}) = 1$$

ENEM



PROBABILIDADE UNIÃO (U = OU)



$$P(i) = \frac{3}{6} = \frac{1}{2}$$

$$P(R) = \frac{3}{6} = \frac{1}{2}$$

$$P(i \cup R) = \frac{4}{6} = \frac{2}{3}$$



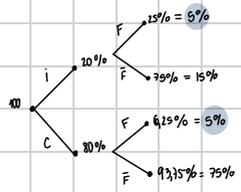
$$P(A \cup B) = P(A) + P(B) - P(A \cap B)$$

eventos mutuamente exclusivo

$$P(A \cap B) = 0$$

ex: par e ímpar

ENEM prova - segunda



$$P(i \cap F) = \frac{5}{5+5} = 0,5$$