Giullio Emmanuel da Cruz Di Gerolamo

RA: 790965

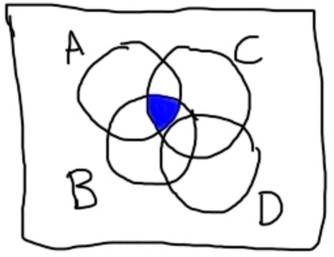
Rafael Izbicki

Prob e Estatística

A: a primeira carta é um rei, B: a segunda carta é um rei, C: a primeira carta é de espadas, D: a primeira carta é uma rainha.

Calcule $P(A \cap B \cap C)$.

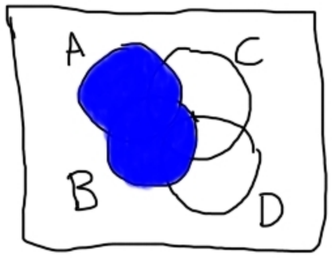
$$\frac{\frac{\text{Rei}}{1} \cdot \frac{\text{Rei}}{3}}{\frac{\text{carta}}{52} \cdot \frac{\text{carta}}{51}} = \frac{3}{2652} = \frac{1}{884}$$



EVENTOS INDEPENDENTES //

Calcule $P(A \cup B)$.

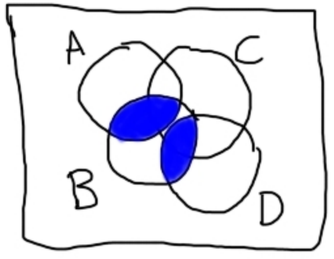
$$\frac{\frac{\text{Rei}}{4} \cdot \frac{\text{qualquer outra carta}}{51} + \frac{\text{qualquer outra carta}}{51} \cdot \frac{\text{Rei}}{4} - \frac{\text{Rei}}{4} \cdot \frac{\text{outro Rei}}{3}}{\frac{\text{carta}}{52} \cdot \frac{\text{carta}}{51}} = \frac{396}{2652} = \frac{33}{221}$$



EVENTOS INDEPENDENTES //

Calcule $P((A \cup D) \cap B)$.

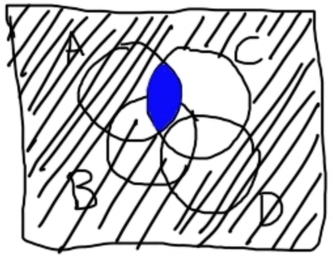
$$\frac{\frac{\text{Rei}}{4} \cdot \frac{\text{Rei}}{3} + \frac{\text{Rainha}}{4} \cdot \frac{\text{Rei}}{4}}{\frac{\text{carta}}{52} \cdot \frac{\text{carta}}{51}} = \frac{28}{2652} = \frac{7}{663}$$



MUTUAMENTE EXCLUSIVOS //

Calcule $P(A|C)$.

$$\frac{\frac{\text{Rei}}{1} \cdot \frac{\text{qualquer outra carta}}{51}}{\frac{\text{carta}}{13} \cdot \frac{\text{qualquer outra carta}}{51}} = \frac{1}{13}$$



EVENTOS INDEPENDENTES //