

Experience:

Tirer Succ. Sans remise

2 jets.

$$\text{card } \Omega = A_{10}^2 = 10 \times 9$$

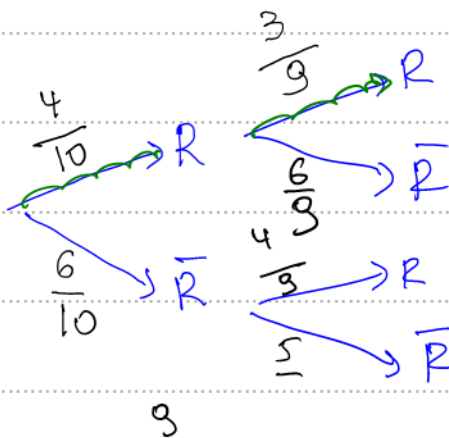
4 R : 1, 1, 1, 1, 0

6 N : 1, 1, 1, 1, 0, 0

1)  $p$  (1<sup>er</sup> jeton et le 2<sup>ème</sup> sont rouges)

$$p(\underline{\textcircled{R}}, \underline{\textcircled{R}}) = \frac{A_4^2}{A_{10}^2} = \frac{4 \times 3}{90}$$

$$= \frac{4}{10} \times \frac{3}{9}$$



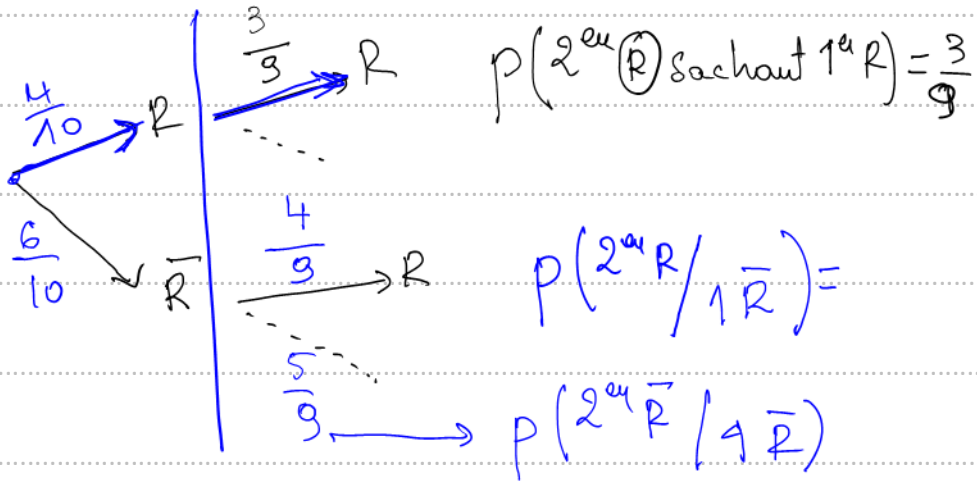
$$p(R \cap R) = \frac{4}{10} \times \frac{3}{9}$$

$$2) p(2^{\text{ème}} \text{ rouge}) = p\left[\underline{(R, R)} \cup \underline{(N, R)}\right]$$

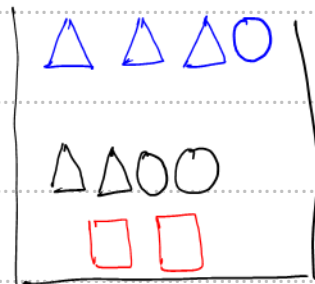
↓  
4

$$P(2^{\text{eme}} \textcircled{R}) = P((R, R)) + P(\bar{R}, R) - 0$$

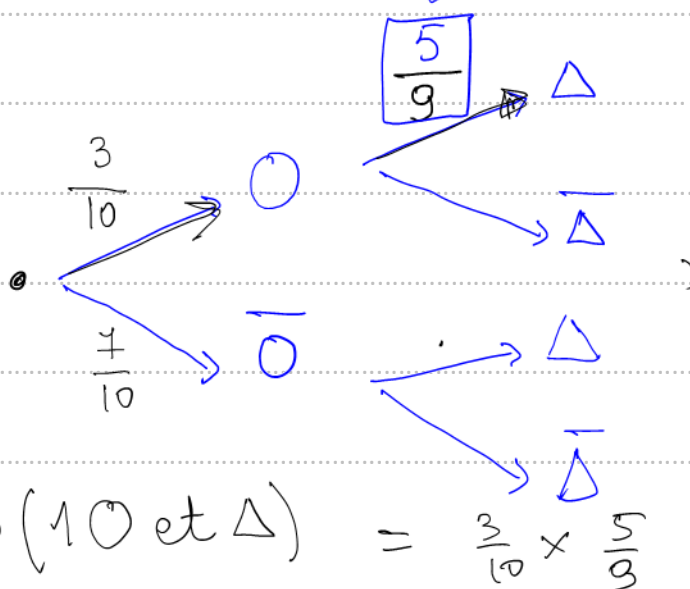
$$= \frac{4}{10} \times \frac{3}{9} + \frac{6}{10} \times \frac{4}{9} = \frac{36}{90}$$



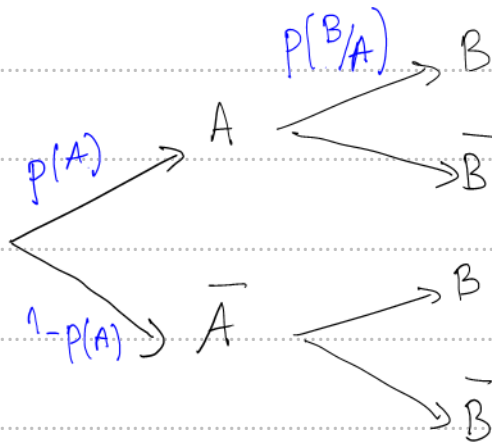
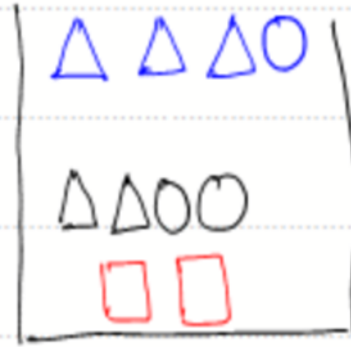
Tirer : succ 2 jetons  
Sans remise.



$P(2^{\text{eme}} \text{ jeton } \Delta \text{ sachant le } 1^{\text{er}} \textcircled{O})$



$$P(2^{\text{nd}} \Delta / 1^{\text{st}} \Delta) = \frac{4}{9}$$



$$P(A) \times P(B/A) = P(A \cap B)$$



$$P(B/A) = \frac{P(A \cap B)}{P(A)}$$

$$3(R) : 0, 1, 1$$

$$4(B) : 0, 0, 1, 1$$

$$3(N) : -1, 0, 1$$

1 Tirer simultanément 3 boules :

$$\text{card } \Omega = C_{10}^3 = 120$$

$$\rightarrow A = \underline{(3R)} \text{ ou } 3B \text{ ou } 3N$$

$$P(A) = \frac{C_3^3 + C_4^3 + C_3^3}{120} = \frac{6}{120}$$

$$\rightarrow B = \left\{ \boxed{10 \text{ et } 2(1)} \right\} \text{ ou } \left\{ \boxed{20 \text{ et } 1} \right\} \text{ ou } \left\{ \boxed{20 \text{ et } (-1)} \right\}$$

$$\text{ou } \left\{ \boxed{10 \quad 1(-) \text{ et } 1(+)} \right\} \text{ ou } \{30\}.$$

OU

$$B = \left\{ \boxed{10 \text{ et } 2\bar{0}} \right\} \text{ ou } \left\{ \boxed{20 \text{ et } 1\bar{0}} \right\} \text{ ou } \{30\}$$

$$P(B) = \frac{C_4^1 \times C_6^2 + C_4^2 \times C_6^1 + C_4^3}{120}$$

$$= \frac{4 \times 15 + 6 \times 6 + 4}{120} = \frac{100}{120}$$

donc  $\overline{B} = (\text{produit} \neq 0)$

$$\overline{B} = \{3 \overline{0}\} \quad C_6^3$$

$$p(\overline{B}) = \frac{20}{120} = \frac{1}{6}$$

$$\text{donc } p(B) = 1 - p(\overline{B}) = \frac{100}{120} = \frac{5}{6}$$

$$C = \{3 \overline{0}\} \text{ ou } \{1 \overline{0}, 1 \overline{1} \text{ et } 1 \overline{2}\}$$

$$p(C) = \frac{C_4^3 + C_4^1 \times C_5^1 \times C_1^1}{120} = \frac{1}{5}$$

$$* p(A|B) = \frac{p(A \cap B)}{p(B)} = \frac{?}{\frac{5}{6}}$$

$$A \cap B = \{3 \overline{0}\} \text{ ou } 3 \overline{N} \text{ ou } \{0_B, 2 B_{\overline{0}}\} \text{ ou } (2 0_B, 1 B_{\overline{0}})$$

$$p(A \cap B) = \frac{C_3^3 + C_3^3 + C_2^1 \times C_2^2 + C_2^2 \times C_2^1}{120}$$

$$p(A \cap B) = \frac{6}{120} = \frac{1}{20}$$

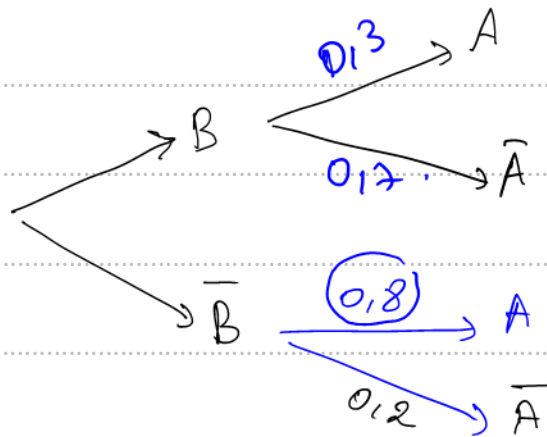
$$\text{d'où } p(A/B) = \frac{p(A \cap B)}{p(B)} = \frac{\frac{1}{20}}{\frac{5}{6}} = \frac{6}{100} = \frac{3}{50}$$

Remarque:

$\bar{A}$  : les 3 boules ne sont pas de même couleur.

$$\bar{A} \left\{ \begin{array}{l} \text{○○○ ou } \text{○○○} \text{ ou } \text{○○○} \\ \text{○○○} \text{ ou } \text{○○○} \\ \text{○○○} \text{ ou } \text{○○○} \end{array} \right.$$

$$p(A/B) + p(\bar{A}/B) = 1$$



$$\text{puisque } p(\bar{A}/B) = 1 - p(A/B) = 1 - \frac{6}{100} = \frac{94}{100}$$

b)

au moins 1 R

$(R, V, V)$   
 $(V, R, V)$   
 $(V, V, R)$   
 $(R, R, V)$   
 $(V, R, R)$   
 $(R, V, R)$   
 $(R, R, R)$   
 $(V, V, V)$

au moins 1 R

$\Omega$

$$b) p(A \cap C) = ?$$

$$(A \cap C) = 3(N)$$

$$p(A \cap C) = \frac{C_3^3}{120} = \frac{1}{120}$$

$$* P(A \cup C) = P(A) + P(C) - P(A \cap C)$$

$$= \frac{6}{120} + \frac{1}{5} - \frac{1}{120} =$$

$$* P(A/C) = ?$$

Sachant que la Somme des N° est 67 Zéro (C)

calculer la proba qu'elle soient 3 mêmeurs (A)

$$\begin{aligned} \bullet P_C(A) = P(A/C) &= \frac{P(A \cap C)}{P(C)} = \frac{\frac{1}{120}}{\frac{1}{5}} \\ &= \frac{5}{120} = \end{aligned}$$

$$\bullet P(A/\bar{C}) = \frac{P(A \cap \bar{C})}{P(\bar{C})} = \frac{?}{\frac{4}{5}}$$

$$(A \cap \bar{C}) = 3(\bar{R}) \text{ ou } 3(R)$$

$$P(A \cap \bar{C}) = \frac{C_3^3 + C_4^3}{120} = \frac{5}{120}$$

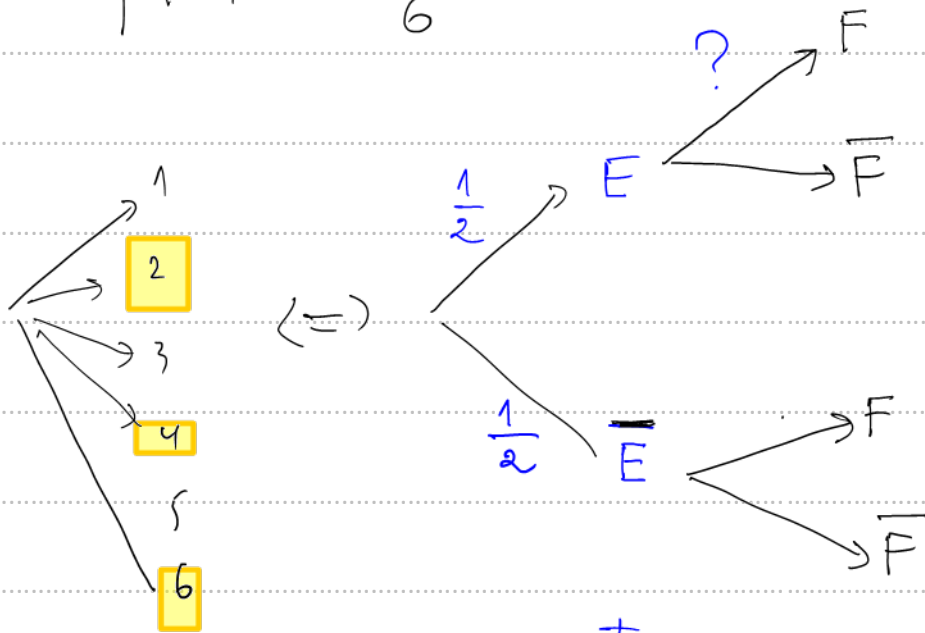


$$P(A/\bar{C}) = \frac{5/120}{\frac{4}{120}} = \frac{25}{480} = \dots$$

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

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

3)



$$P(F/E) = \frac{P(F \cap E)}{P(E)} = \frac{1}{2}$$

$$F \cap E = (\text{Pair}, 0, 0) \text{ or } (E, 1, 1) \text{ or } (E, -1, -1)$$

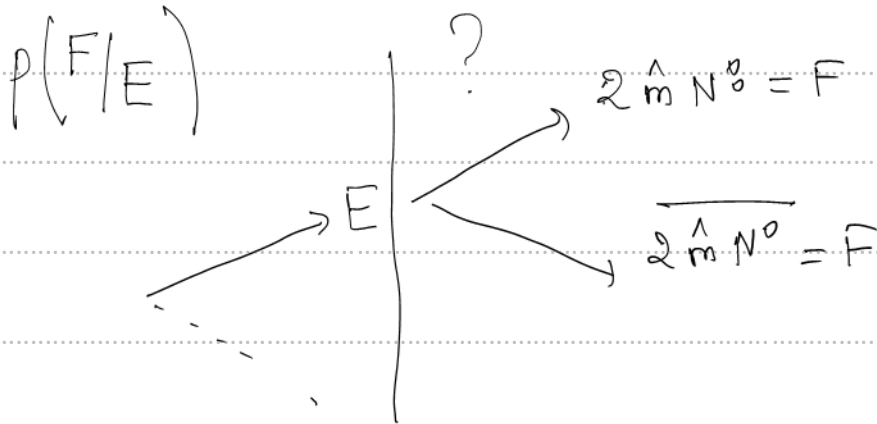
$$P(F \cap E) = \frac{1}{2} \times \frac{4}{10} \times \frac{4}{10} + \frac{1}{2} \times \frac{5}{10} \times \frac{5}{10} + \frac{1}{2} \times \frac{1}{10} \times \frac{1}{10}$$

$\frac{4^2}{10^2}$

$$P(F/E) = \frac{\frac{1}{2} \left( \frac{4^2}{10^2} + \frac{5^2}{10^2} + \frac{1^2}{10^2} \right)}{\frac{1}{2}}$$

$$P(F/E) = \frac{4^2 + 5^2 + 1^2}{100}$$

ou



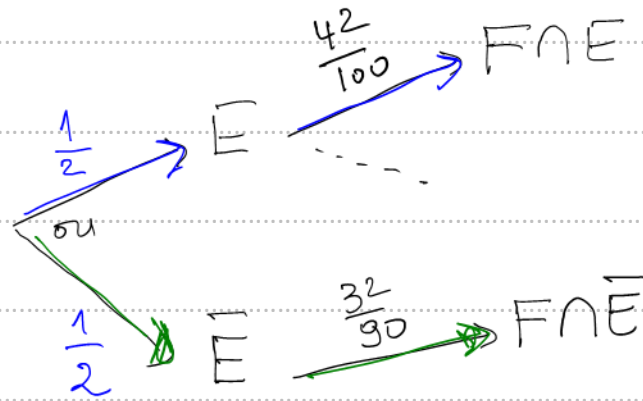
$$P(F/E) = P[(0,0) \text{ ou } (2,1) \text{ ou } 2,1)]$$

$$= \frac{4^2 + 5^2 + 1^2}{10^2}$$

$$\times P(F/E) = P[(0,0) \text{ ou } (1,1)]$$

$$= \frac{4}{10} \times \frac{3}{9} + \frac{5}{10} \times \frac{4}{9}$$

$$= \frac{A_4^2 + A_5^2}{A_{10}^2}$$



$$F = (E \cap F) \text{ or } (\bar{E} \cap F)$$

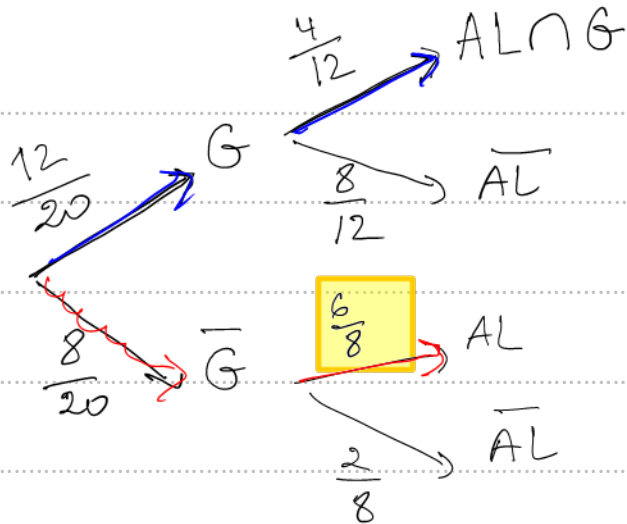
$$P(F) = P(E \cap F) + P(\bar{E} \cap F) = 0$$

$$= \frac{1}{2} \times \frac{42}{100} + \frac{1}{2} \times \frac{32}{90}$$

b)

$$P(E|F) = \frac{P(E \cap F)}{P(F)}$$

$$= \frac{\frac{1}{2} \times \frac{42}{100}}{\frac{1}{2} \times \frac{42}{100} + \frac{1}{2} \times \frac{32}{90}}$$



$$p(G \cap AL) = \frac{12}{20} \times \frac{4}{12} = \frac{4}{20}$$

$$p\left(\frac{AL}{\bar{G}}\right) = \frac{6}{8}$$

$$p(AL) = ?$$

$$AL = (AL \cap G) \text{ ou } (AL \cap \bar{G})$$

$$p(AL) = \frac{12}{20} \times \frac{4}{12} + \frac{8}{20} \times \frac{6}{8}$$

$$= \dots$$

[illegible]



[illegible]

[illegible]













This image shows a full-page view of a worksheet. At the top left, there's a yellow curved banner with the word "Maths" in black. To its right is a circular logo for "Taki Academy" with the website address below it. The main body of the page is filled with horizontal dotted lines for handwriting practice. At the bottom left corner, there is another circular logo featuring Arabic calligraphy and the year "2024". The entire page is framed by light blue borders at the top and bottom.

[illegible]

This image shows a full-page view of a worksheet template. At the top, there is a yellow curved banner with the word "Maths" in black font. To the right of this banner is a circular logo for "Taki Academy" which includes a book icon and the website address "www.takiacademy.com". The main body of the page consists of numerous horizontal dotted lines for writing. At the bottom left corner, there is another circular logo featuring Arabic calligraphy and the year "2024". The entire page is framed by light blue borders at the top and bottom.



[illegible]