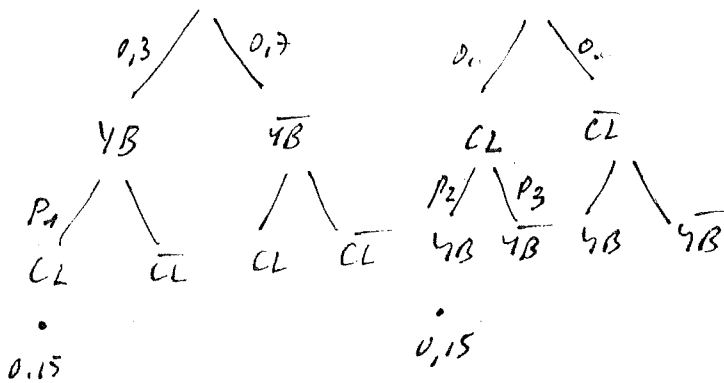


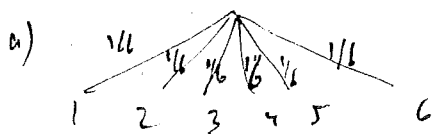
MA 4N Mini test n°3 - Corrigé

ex 2



- a) $P(\overline{YB}) = 1 - P(YB) = 0.7$
- b) $P(CL \cap YB) = P(YB \cap CL) = 0.15$
- c) $P(CL / YB) = \frac{P(CL \cap YB)}{P(YB)} = \frac{0.15}{0.3} = 0.5 = P_1$
- d) $P(YB / CL) = \frac{P(YB \cap CL)}{P(CL)} = \frac{0.15}{0.4} = 0.375 = P_2$
- e) $P(\overline{YB} / CL) = 1 - P_2 = 0.625 = P_3$

ex 1



$A = \{1; 2; 3; 4; 5\}$

$B = \{3; 6\}$

$A \cap B = \{3\}$

$P(A) = 5/6$

$P(B) = 2/6$

$P(A \cap B) = 1/6$

$P(A) \cdot P(B) \neq P(A \cap B)$

$\Rightarrow \frac{5}{6} \cdot \frac{2}{6} \neq \frac{1}{6}$

$\Rightarrow \frac{10}{6} \neq 1$ non

A et B sont dépendants
(ne sont pas indépendants)

b) $C = \{1; 2; 3\}$

$B \cap C = \{3\}$

$P(C) = \frac{1}{2}$

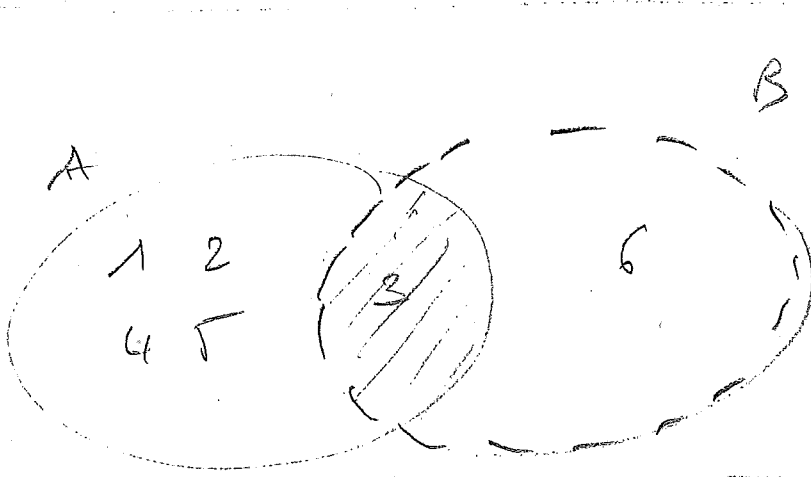
$P(B \cap C) = \frac{1}{6}$

$P(B \cap C) \neq P(B) \cdot P(C)$

$\Rightarrow \frac{1}{6} \neq \frac{1}{3} \cdot \frac{1}{2}$ oui

B et C sont indépendants

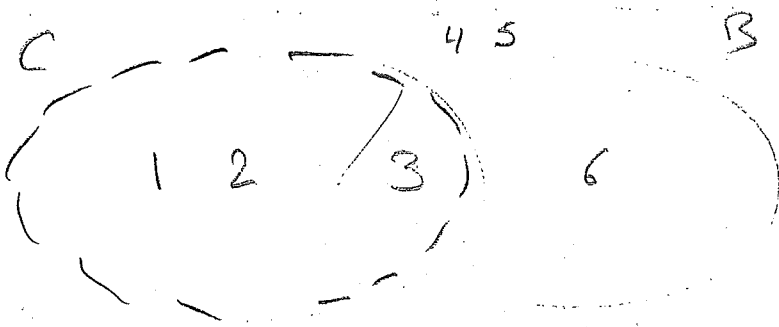
1(a)



$$P(A) = \frac{5}{6}$$

$$P(\bar{A}|\bar{B}) = \frac{1}{2}$$

1(b)



$$P(B) = \frac{1}{2}$$

$$P(\bar{B}|\bar{C}) = \frac{1}{2}$$

2

