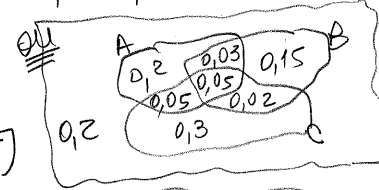


(1) (a)  $P(A \cup B \cup C) = P(A \cap B) + P(A \cap C) + P(B \cap C) + 2P(A \cap B \cap C) =$   
 $= P(A) + P(B) + P(C) - P(A \cap B) - P(A \cap C) - P(B \cap C) + P(A \cap B \cap C) =$   
 $= 0,33 + 0,25 + 0,42 - 0,08 - 0,1 - 0,07 + 2(0,05) = 0,65$

(b)  $1 - [P(A \cap B) + P(B \cap C) + P(A \cap C) - 2P(A \cap B \cap C)] =$   
 $= 1 - [0,08 + 0,1 + 0,07 - 2(0,05)] = 1 - 0,15 = 0,85$

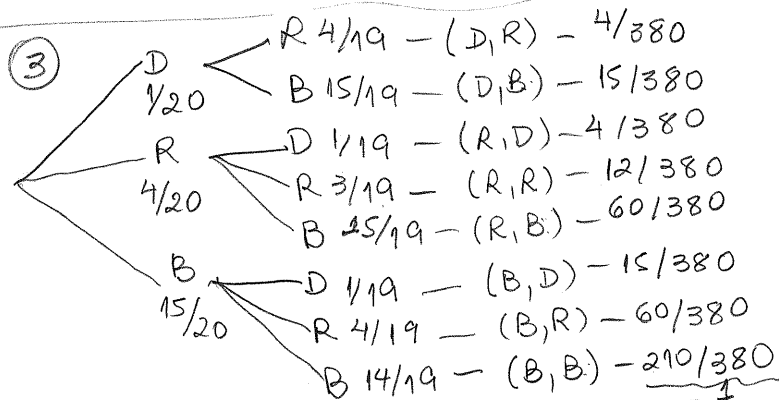


(2)

	S	R	M
18A	7	2	9
18B	8	5	13
	15	7	22

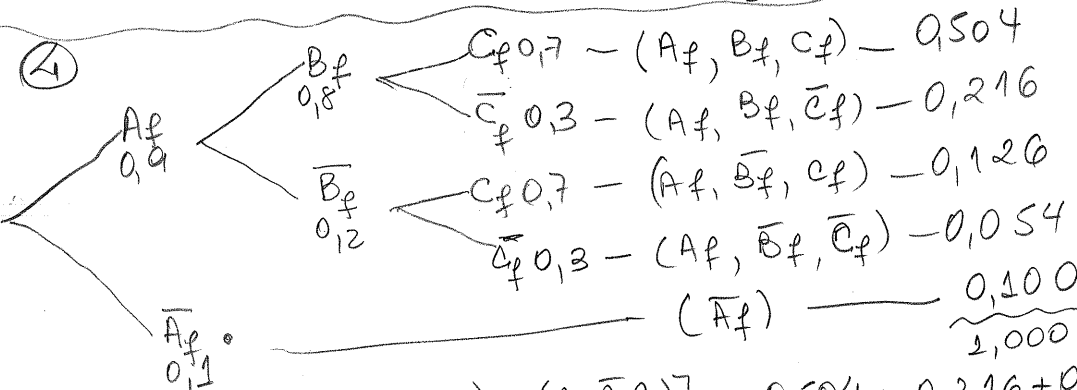
(a)  $P(\bar{B} \cup M) = P(\bar{B}) + P(M) - P(\bar{B} \cap M) =$   
 $= 1 - P(B) + P(M) - P(\bar{B} \cap M) =$   
 $= 1 - \frac{13}{22} + \frac{7}{22} - \frac{2}{22} = 1 - \frac{8}{22} = \frac{14}{22}$

(b)  $P(\bar{A} \cap \bar{R}) = P(\overline{A \cup R}) = 1 - P(A \cup R) = 1 - [P(A) + P(R) - P(A \cap R)] =$   
 $= 1 - \left[ \frac{9}{22} + \frac{15}{22} - \frac{7}{22} \right] = 1 - \frac{17}{22} = \frac{5}{22}$



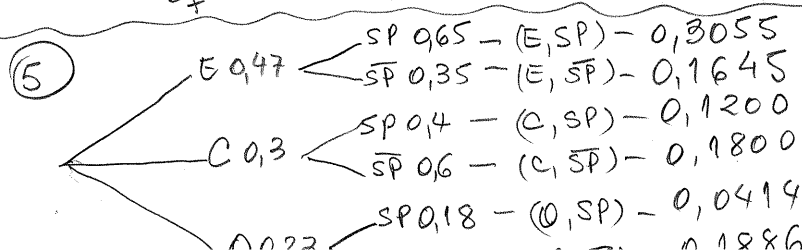
(a)  $P[(D,B) \cup (R,B) \cup (B,D) \cup (B,R) \cup (B,B)] = \frac{15 + 60 + 15 + 60 + 210}{380} = \frac{360}{380} = \frac{36}{38}$

(b)  $P(R|B) = \frac{60}{15 + 60 + 210} = \frac{60}{285}$



(a)  $P[(A,B,C) \cup (A,B,\bar{C}) \cup (A,\bar{B},C)] = 0,504 + 0,216 + 0,126 = 0,846$

(b)  $P(C|A) = \frac{0,504 + 0,126}{0,846} = \frac{0,630}{0,846} = \frac{630}{846}$



(a)  $P(\bar{S} \cup C) = 0,1645 + 0,12 + 0,18 + 0,1886 = 0,6531$

(b)  $P(\bar{E}) = \frac{0,18 + 0,1886}{0,1645 + 0,12 + 0,1886} = \frac{0,3686}{0,4731} = \frac{3686}{4731}$