(means U boys) $= \frac{1}{2} + \frac{1}{3} - \frac{1}{6} = \frac{5}{6} - \frac{1}{6} = \frac{4}{6} = \frac{2}{3}$

(i) $P(A^c) = 1 - P(A) = \frac{8}{8} - \frac{3}{8} = \frac{5}{8}$

(ii) $P(B^c) = 1 - P(B) = \frac{8}{8} - \frac{4}{8} = \frac{1}{2}$

(iii) $P(A^c \cap B^c) = \frac{5}{8}$ ~~$P(A^c) \quad P(B^c) \quad P(A^c \cap B^c)$~~ $= 1 - P(A$

(iv) $P(A^c \cup B^c) = P(A^c) - P(B^c) - P(A^c \cap B^c) = \frac{5}{8} + \frac{1}{2} - \frac{5}{8} =$

) $P(A \cap B^c) = \frac{1}{2}$

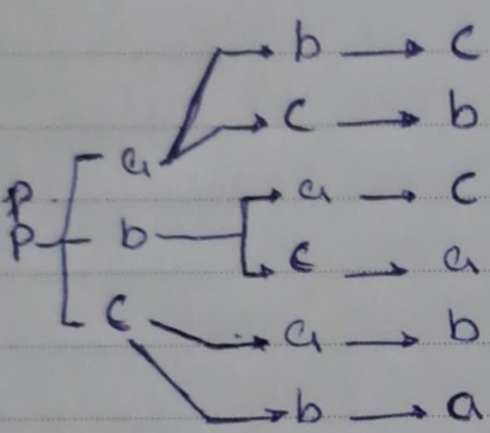
(Vi) $P(B \cap A^c) = \frac{5}{8}$

zero

$\Sigma P(x) = 1 = k^2 - 8 \qquad k^2 = 9 \qquad k = 3$

$1 - (A \cup B) = 1 - 0,8 = 0,2$

First, there are 4 students will have each test so we should exc
them by : $12C4 = 495$
then, There are 8 students remained with the second test so
$= 8C4 = 70$ and Finally $4C4 = 1$
So the result is : $495 * 70 * 1 = 34,650$



First
$p(a) = \frac{4}{12} \times \frac{3}{11} = \frac{1}{11}$
$p(b) = \frac{8}{12} \times \frac{7}{11} = \frac{8}{33}$

i) $= p(a) \cdot p(b) = \frac{1}{11} + \frac{8}{33} = \frac{3}{33} + \frac{8}{33} = \frac{1}{3}$
i) = atleast one defective $= 1 - p(b) = p(b)' = 1 - \frac{8}{33} = \frac{3}{3}$

(i) $\frac{10}{15} \times \frac{9}{14} \times \frac{8}{13} = \frac{560}{3003} = \frac{80}{429}$

(ii) $5C1 \times 10C2 = 225$ From $15C3 = 455$
So the result is : $\frac{225}{455} = \frac{45}{91}$

(iii) From (i) : $1 - \frac{560}{3003} = \frac{349}{429}$

From mansoura : $\frac{15}{30} = 15$ / boys : $\frac{10}{20} = \frac{1}{3}$ / Mans \ boys : $\frac{1}{6}$