Prob. C. Atuariais I - Lista 4

4.1: $\dfrac{5 \cdot {}_{25}A_2 \cdot {}_8A_3 \cdot 4}{{}_{26}A_3 \cdot {}_9A_4} = \dfrac{5 \cdot 25 \cdot 24 \cdot 8 \cdot 7 \cdot 6 \cdot 4^2}{\underset{13}{26} \cdot 25 \cdot 24 \cdot 9 \cdot 8 \cdot 7 \cdot 6} = \dfrac{10}{117}$

4.2: a) $\dfrac{5}{6 \cdot 6} = \dfrac{5}{36}$

b) 1.(1 2 3 4) $\dfrac{\overset{5}{10}}{\underset{18}{36}} = \dfrac{5}{18}$

2 (1 2 3)

3 (1 2)

4 (1)

4.3: $\dfrac{20 \cdot 19}{52 \cdot 51} = \dfrac{\overset{95}{380}}{\underset{663}{2652}} = \dfrac{95}{663}$

4.4: a) $\dfrac{1 \cdot \binom{8}{2}}{\binom{9}{3}} = \dfrac{28}{84} = \dfrac{1}{3}$

b) $\dfrac{\binom{5}{2}\binom{3}{1}}{\binom{9}{3}} = \dfrac{\overset{5}{10} \cdot 3}{\underset{42 / 14}{84}} = \dfrac{5}{14}$

4.5: