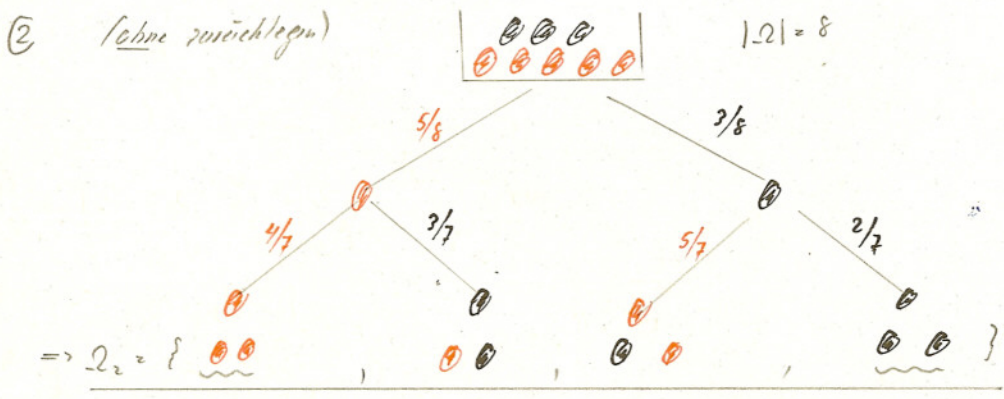
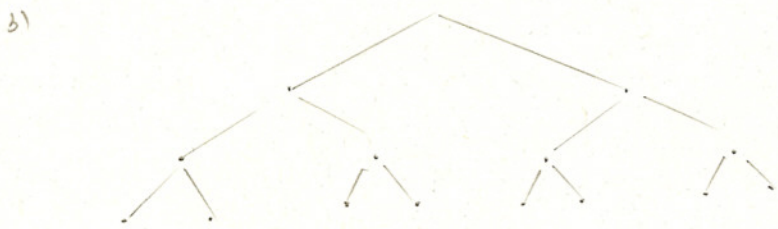
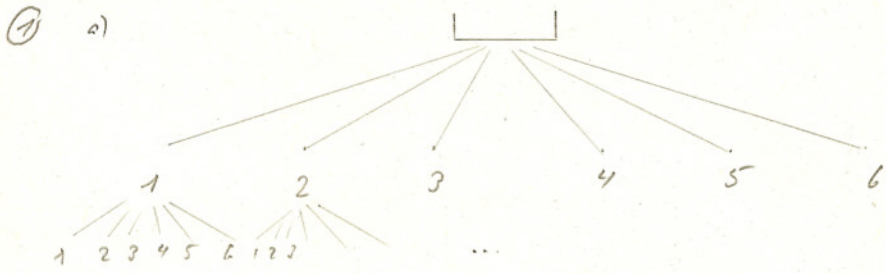
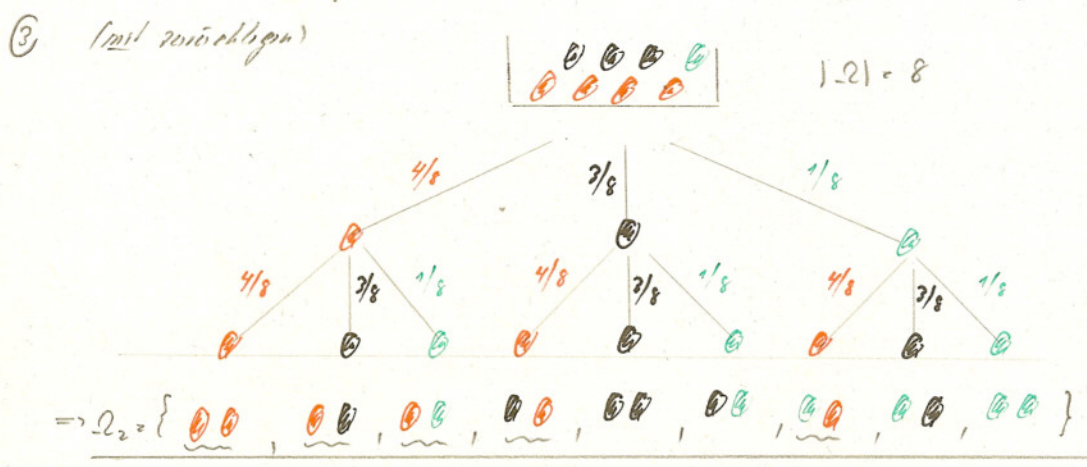


Wahrscheinlichkeit 3

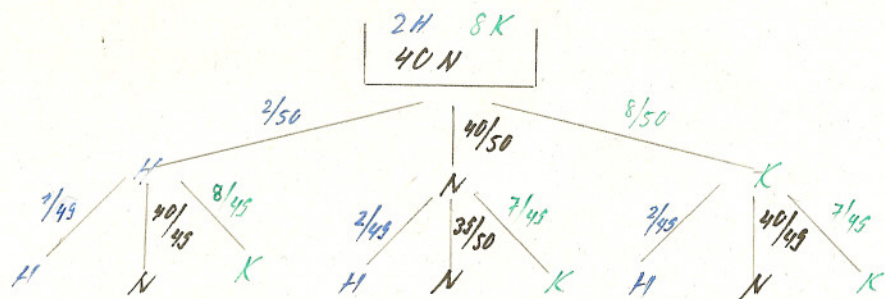


$$P(A) = P(\{\text{red, red}, \text{black, black}\}) = \frac{5}{8} \cdot \frac{4}{7} + \frac{3}{8} \cdot \frac{2}{7} = \underline{\underline{\frac{26}{56}}}$$



$$P(A) = P(\{\text{red, red}, \text{black, black}, \text{green, green}\}) = \underbrace{\frac{4}{8} \cdot \frac{4}{8} + \frac{4}{8} \cdot \frac{3}{8} + \frac{4}{8} \cdot \frac{1}{8}}_{= \frac{1}{2}} + \frac{3}{8} \cdot \frac{4}{8} + \frac{1}{8} \cdot \frac{4}{8} = \underline{\underline{\frac{48}{64}}}$$

4)



$\Rightarrow \Omega_2 = \{ HH, HN, HK, NH, NN, NK, KH, KN, KK \}$

a) $P(A) = \dots = \frac{672}{2450}$, $P(B) = \dots = \frac{194}{2450}$

b) $P(NKNNH) = \frac{40}{50} \cdot \frac{8}{49} \cdot \frac{38}{48} \cdot \frac{38}{47} \cdot \frac{2}{46} = \frac{948480}{254251200}$

- 5) a) $1/36$
 b) $1/36$
 c) $1/36$