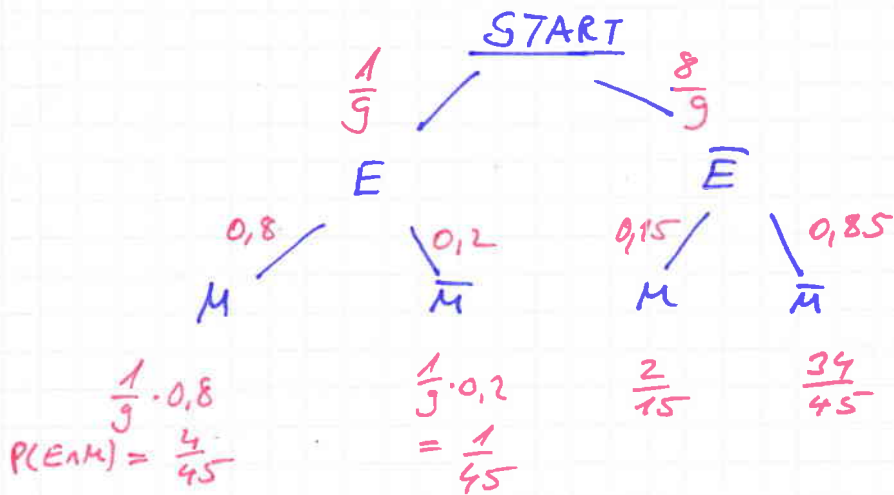


N1.4

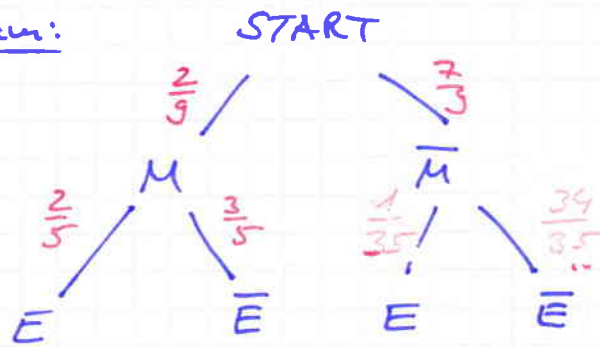
a) E: „Ei erhalten“ M: „Martin vermischt Ei“



gesucht:  $P_M(E) = \frac{P(E \cap M)}{P(M)}$

$$= \frac{P(E \cap M)}{P(E \cap M) + P(\bar{E} \cap M)} = \frac{\frac{4}{45}}{\frac{4}{45} + \frac{2}{15}} = \frac{2}{5}$$

alternatives Damm:



NR:  $P_{\bar{M}}(E) = \frac{P(E \cap \bar{M})}{P(\bar{M})} = \frac{P(E \cap \bar{M})}{P(E \cap \bar{M}) + P(\bar{E} \cap \bar{M})}$

$$= \frac{\frac{1}{45}}{\frac{1}{45} + \frac{34}{45}} = \frac{1}{35}$$

b.)

	E	$\bar{E}$	
M	$\frac{1}{9} \cdot 0,8 = \frac{4}{45}$	$\frac{8}{9} \cdot 0,15 = \frac{2}{15}$	$\frac{2}{9}$
$\bar{M}$	$\frac{1}{45}$	$\frac{34}{45}$	$\frac{7}{9}$
	$\frac{1}{9}$	$\frac{8}{9}$	1