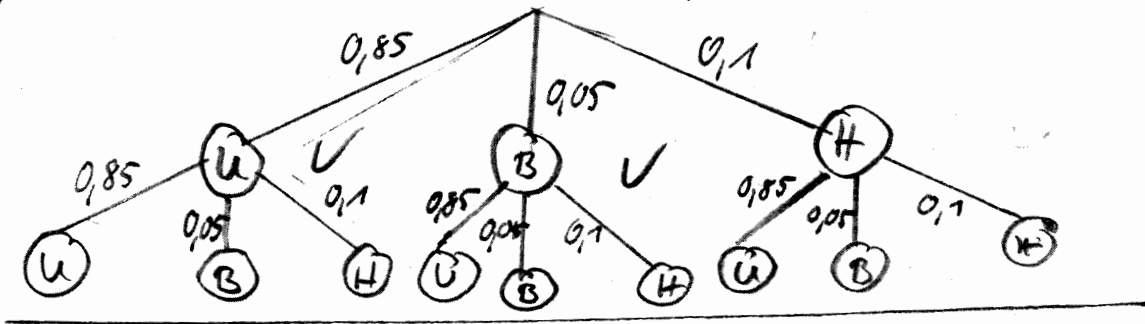


A. A



$\Omega = \{UU, UB, UH, BU, BB, BH, HU, HB, HH\}$ ✓
 $P(\omega)$ 0,7225 0,0425 0,085 0,0425 0,0025 0,005 0,085 0,005 0,01 ✓ (6)

1.2 $E_1 = \{VV, VH, HV, HH\}$, $P(E_1) = 0.7225 + 2 \cdot 0.085 + 0.01 = 0.9025$

$$E_2 = \{UH, BH, HU, HB\}, P(E_2) = 2 \cdot 0,085 + 2 \cdot 0,005 = 0,18$$

$$E_3 = \overline{E_1 \cup E_2} = \overline{E_1} \cap \overline{E_2} \quad \text{für } P(E_3) = 0,0025 + 0,0425 + 0,0425 = 0,0875$$

Weg 1: $\{UB, BU, BB, HB, BH\} \cap \{UU, BB, HH, UB, BU\} = \{UB, BU, BB\}$

Weg 2:  aus der Skizze: (E_3 ist im äußeren Feld)
 $E_3 = \{BB, VB, BU\}$

1.3 E_4 : "Mindestens ein Kind spricht Bairisch." (2)

2.1	B	$\bar{B}$	
G	10	20	30 ✓
$\bar{G}$	11	4	15 ✓
	21 ✓	24 ✓	45

(oder)

	B	$\bar{B}$	
G	$\frac{10}{45} = 0,22\bar{2}$	$\frac{20}{45} = 0,44\bar{4}$	$\frac{30}{45} = 0,66\bar{6}$
$\bar{G}$	$\frac{11}{45} = 0,24\bar{4}$	$\frac{4}{45} = 0,08\bar{8}$	$\frac{15}{45} = 0,33\bar{3}$
	$\frac{21}{45} = 0,46\bar{6}$	$\frac{24}{45} = 0,53\bar{3}$	1

③

2.2 $P(G) \cdot P(B) = \frac{30}{45} \cdot \frac{21}{45} = \frac{14}{45} \approx 0,311\bar{1}$ $\left. \vphantom{\frac{14}{45}} \right\} + \text{also stochastisch}$
 $P(G \cap B) = \frac{10}{45} = \frac{2}{9} \approx 0,22\bar{2}$ $\left. \vphantom{\frac{2}{9}} \right\} \text{abhängig} \quad \checkmark (2)$