

Lösungen Einstiegsaufgabe 2

1.

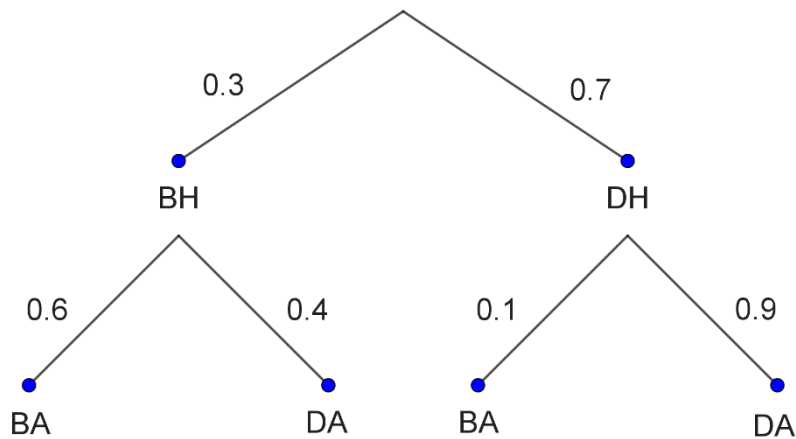
	blond (BH)	dunkelh. (DH)	Total
blauäugig (BA)	180 (= 0.6 · 300)	70 (= 0.1 · 700)	250
dunkeläugig (DA)	120	630	750
Total	300	700	1000

$$\rightarrow \text{a) } p(DH \text{ und } BA) = p(DH \cap BA) = \frac{70}{1000} = 7\%$$

$$\text{b) } p(BA | DH) = \frac{70}{700} = 10\%$$

$$\text{c) } p(DH | BA) = \frac{70}{250} = 28\%$$

2.



$$\rightarrow \text{a) } p(DH \text{ und } BA) = p(DH \cap BA) = 0.7 \cdot 0.1 = 7\%$$

$$\text{b) } p(BA | DH) = \frac{p(BA | DH)}{p(DH)} = \frac{0.7 \cdot 0.1}{0.7} = 10\%$$

$$\text{c) } p(DH | BA) = \frac{p(DH | BA)}{p(BA)} = \frac{0.7 \cdot 0.1}{0.3 \cdot 0.6 + 0.7 \cdot 0.1} = 28\%$$