7.) zz: $P(B_i|A) = \frac{P(B_i)\cdot P(A|B_i)}{\sum_{j\in I} P(B_j)\cdot P(A|B_j)}$

$$P(B_i|A) = \frac{P(B_i \cap A)}{P(A)} = \frac{P(B_i \cap A)}{\sum_{j\in I} P(B_j)\cdot P(A|B_j)} = \frac{P(B_i)\cdot \frac{P(A\cap B_i)}{P(B_i)}}{\sum_{j\in I} P(B_j)\cdot P(A|B_j)}$$

$$= \frac{P(B_i)\cdot P(A|B_i)}{\sum_{j\in I} P(B_j)\cdot P(A|B_j)}$$

□