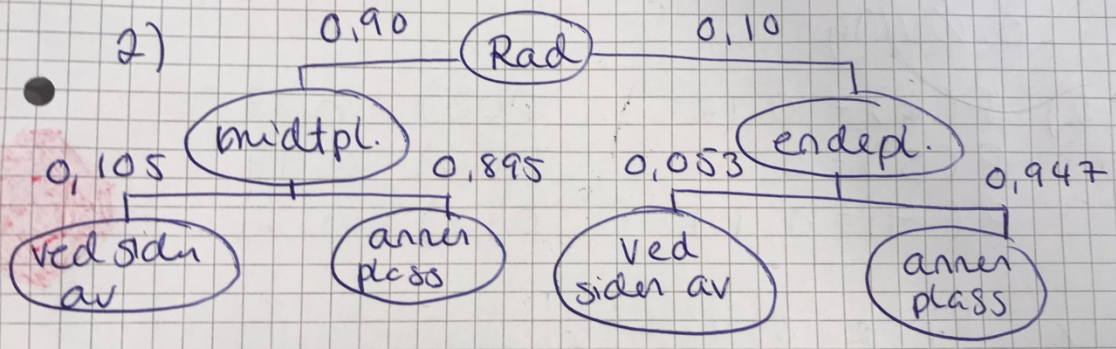
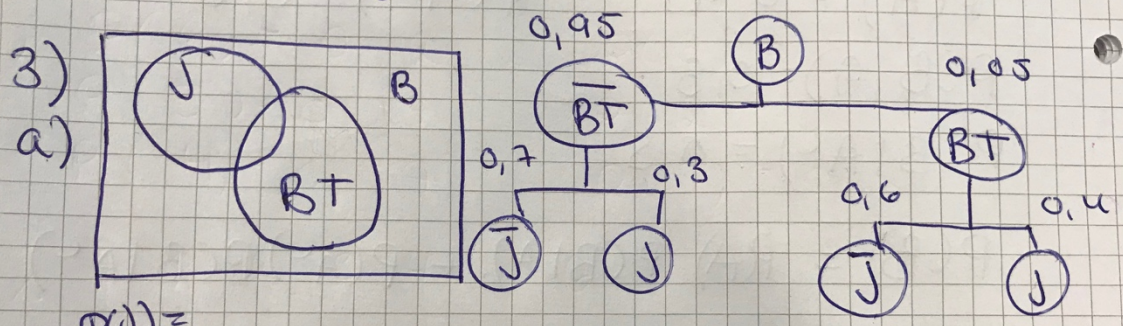
2)



$(0,9 \cdot 0,105) + (0,1 \cdot 0,053) = \underline{0,0993}$

3)

a)

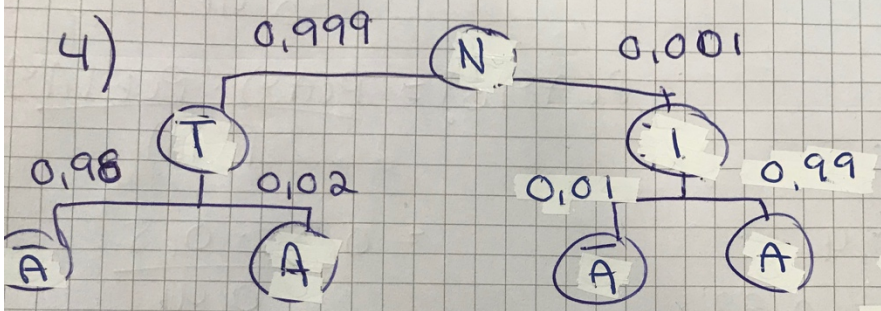


b) $P(J) = (0,95 \cdot 0,3) + (0,05 \cdot 0,4) = \underline{0,305}$

c) $P(BT \cap J) = (0,05 \cdot 0,4) = \underline{0,02}$

d) $P(BT \mid J) = \frac{P(BT \cap J)}{P(J)} = \frac{0,02}{0,305} = \underline{0,066}$

4)



$P(I^C) = 0,999$

$P(I) = 0,001$

$P(A \mid I) =$

$P(A \mid I^C) = 0,02$

$P(A \mid I) = 0,99$

$P(I \mid A) = P(I) \cdot P(A \mid I) + P(I^C) \cdot P(A \mid I^C)$

$= 0,001 \cdot 0,99 + 0,999 \cdot 0,02$

$= \underline{0,021}$