age > 40 , income = low

$$P(age \mid buy) = 3/9$$

$$P(age \mid hot\ buy) = 2/5$$

$$P(income \mid buy) = 3/9$$

$$P(income \mid hot\ buy) = 1/5$$

$$buy = 3/9 \times 3/9 = 0.111$$

$$not\ buy = 2/5 \times 1/5 = 2/25$$

$$= 0.08$$

$$0.111 \times 0.643 = 0.0713$$

$$0.08 \times 0.357 = 0.028$$

age Income low

$p(\text{buy} \mid \text{age} = 31\_40, \text{income} = \text{low})$

$P(\text{age} = 31\_40 \mid \text{buy}) = 4/9 \rightarrow 5/12$

$p(\text{age} = 31\_40 \mid \text{not buy}) = 0/5 \rightarrow 1/8$

$P(\text{income} = \text{high} \mid \text{buy}) = 2/9$

$P(\text{income} = \text{high} \mid \text{not buy}) = 2/5$

$\text{buy} = 5/12 \times 2/9 = 0.09259$

$\text{not buy} = 1/8 \times 2/5 = 0.05$

$0.09259 \, (0.643) = 0.05953$

$0.05 \, (0.357) = 0.01783$