

age > 40 , income low

## Quiz 6

$P(\text{buy} \mid \text{age} > 40, \text{income: high})$

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

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

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

$$P(\text{income} \mid \text{not buy}) = 1/5$$

$$\text{buy} : 3/9 \times 3/9 = 0.111$$

$$\text{not buy} : 2/5 \times 1/5 = 0.08$$

$$\text{Prior} \quad 0.111 \times 0.643 = 0.071377 \quad \checkmark$$

$$0.08 \times 0.357 = 0.02856$$