1. ลพอายุ 35 [illegible] Credit ดีมาก จะซื้อ Computer มั้ย

$P(age = 31-40 \mid buy = yes) = \frac{4}{9} =$

$P(age = 31-40 \mid buy = not) = \frac{0}{5} = 0$

$P(student = no \mid buy = yes) = \frac{2}{5} =$

$P(student = no \mid buy = no) = \frac{2}{5} =$

$P(credit\_rating = excellent \mid buy = yes) = \frac{3}{9} =$

$P(credit\_rating = excellent \mid buy = no) = \frac{3}{5} =$

$X = (age = 31-40, student = No, credit\_rating = excellent)$

X

$P(b = y \mid \underbrace{a < 30, In = med, St = yes, Credit = Fair}_{\vec{x}_{test}})$

$= P(\vec{x}_{train} \mid b = y)\, P(b = y)$ ← $\frac{9}{14}$ $= \boxed{\frac{2}{9} \times \frac{4}{9} \times \frac{6}{9} \times \frac{6}{9}} \times \frac{9}{14} = 0.028$

$= P(a < 30 \mid b = y)\, P(In = med \mid b = y)\, P(st = yes)\, P(credit = Fair \mid b = y)$

($P(a < 30 \mid b = y) \to \frac{2}{9}$, $P(In = med \mid b = y) \to \frac{4}{9}$, $P(st = yes) \to \frac{6}{9}$, $P(credit = Fair \mid b = y) \to \frac{6}{9}$)

$= \frac{2}{9} \times \frac{4}{9} \times \frac{6}{9} \times \frac{6}{9}$

$= 0.044$