Q1) $P(\text{Stolen} = \text{yes}) = \frac{5}{10} \Rightarrow \frac{1}{2}$

$P(\text{Stolen} = \text{no}) = \frac{5}{10} \Rightarrow \frac{1}{2}$

Color	Yes	No
Red	3/5	2/5
Yellow	2/5	3/5

Type	Yes	No
Sports	4/6	2/6
SUV	1/4	3/4

Origin	Yes	No
Domestic	2/5	3/5
Imported	3/5	2/5

for (Red, SUV, Domestic)

(P = yes) { P(Red | yes) P(SUV | yes) P(Domestic | yes)

⇒ $\frac{1}{2} \times \frac{3}{5} \times \frac{1}{4} \times \frac{2}{5}$

⇒ 0.03

(P = No) P(Red | No) P(SUV | No) P(Domestic | No)

⇒ $\frac{1}{2} \times \frac{2}{5} \times \frac{3}{4} \times \frac{2}{5}$

⇒ 0.06

Since 0.06 > 0.03 it gets classified as No.

for (Yellow, SUV, Domestic)

P(yes) P(yellow | yes) P(SUV | yes) P(Domestic | yes)

$\frac{1}{2} \times \frac{2}{5} \times \frac{1}{4} \times \frac{2}{5}$

0.02

P(No) P(yellow/No) P(SUV/No) P(Domestic/No)

$\frac{1}{2} \times \frac{3}{5} \times \frac{3}{4} \times \frac{3}{5}$

0.135

Since 0.135 > 0.02 it gets classified as No.