



$$P(A) = \frac{5}{36}$$

$$P(A/B) = \frac{P(A \cap B)}{P(B)} = \frac{P(A \cap B)}{P(B)}$$

$$P(A \cap B) = \frac{4}{36} \quad P(B) = \frac{30}{36}$$

$$\Rightarrow P(A/B) = \frac{4/36}{30/36} = \frac{4}{36} \cdot \frac{36}{30} = \frac{4}{30} = \frac{2}{15}$$

$$P(A/C) = \frac{P(A \cap C)}{P(C)} \quad P(A \cap C) = \frac{2}{36}$$

$$P(C) = \frac{18}{36}$$

$$\Rightarrow P(A|C) = \frac{2/36}{18/36} = \frac{2}{36} \cdot \frac{36}{18} = \frac{1}{9}$$

$$P(A|\bar{B}) = \frac{P(A \text{ et } \bar{B})}{P(\bar{B})}$$

$$P(A \text{ et } \bar{B}) = \frac{1}{36} \quad P(\bar{B}) = \frac{6}{36}$$

$$\Rightarrow P(A|\bar{B}) = \frac{1}{6}$$

$$P(A|\bar{C}) = \frac{P(A \text{ et } \bar{C})}{P(\bar{C})}$$

$$P(A \text{ et } \bar{C}) = \frac{3}{36} \quad P(\bar{C}) = \frac{18}{36}$$

$$\Rightarrow P(A|\bar{C}) = \frac{3}{18} = \frac{1}{6}$$