

- 1. $A \cap B \cap C = .05$
- 2. $B \cap C = .13$
- 3. $A \cap C = .04$
- 4. $A \cap B = .08$

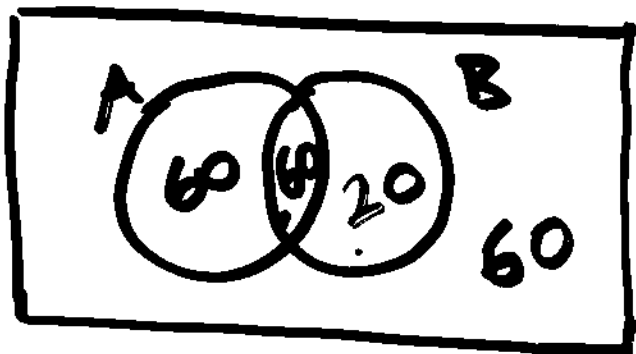
$$P(A|B) = \frac{P(A \cap B)}{P(B)} = \frac{.08}{.23} = .348$$

$$P(A|A \cup B \cup C) = \frac{P(A \cap (A \cup B \cup C))}{P(A \cup B \cup C)} = \frac{P(A)}{P(A \cup B \cup C)} = \frac{.14}{.49} = .286$$

$$P(A \cap B) = P(A|B) \cdot P(B)$$

$$n = 200$$

$$N(U) = 200$$



A = {memory card purchased}

B = {battery purchased}

$$P(A) = 0.60 \quad P(B) = 0.40$$

$$N(A) = 120 \quad N(B) = 80$$

$$N(A \text{ and } B) = 60$$

$$P(A|B) = 0.75$$

$$P(B|A) = 0.50$$

~~XXXXXXXXXX~~

$$\begin{aligned}
 P(A \cap B) &= \underbrace{P(A|B)}_{\text{occurred}} \cdot P(B) \\
 &= \frac{60}{80} \cdot \frac{80}{200} = \frac{3}{10}
 \end{aligned}$$

$$P(A \cap B) = 0.30$$

$$P(A \cup B) = P(A) + P(B) - P(A \cap B)$$

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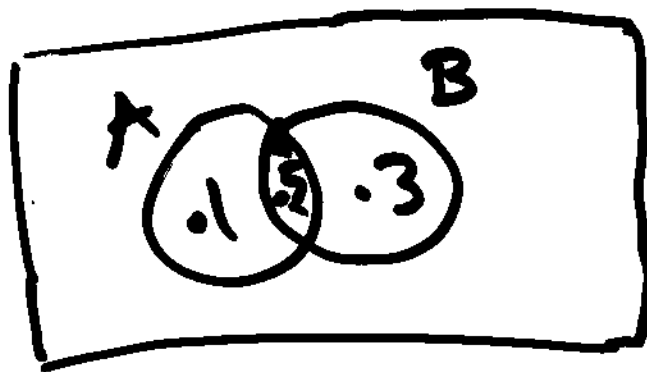


$$P(SS, \text{ functional}) = (0.9)^3$$

$$P(SS, \text{ is not functional}) = 1 - (0.9)^3$$

$$P(SS_2 \text{ is not functional}) = 1 - (0.9)^3$$

$$P(A) + P(A') = 1$$



$$P(A \cup B) = P(A) + P(B) - P(A \cap B)$$

$$P(A) = 0.6$$

$$P(B) = 0.8$$

$$P(A \cup B) = 0.6 + 0.8 - 0.5$$

$$P(A \cup B) = 0.9$$

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