

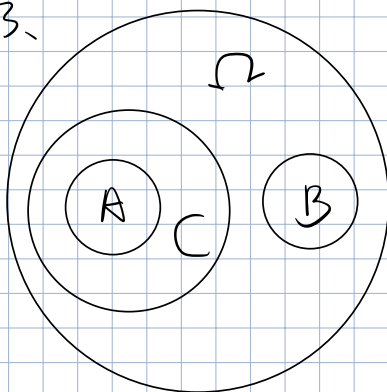
$$1. (1) \quad P(\bar{A}) = 0.6 \quad P(AB) = 0.4 \quad P(A \cup B) = 0.6$$

$$P(\bar{A}B) = 0.2 \quad P(A\bar{B}) = 0 \quad P(\bar{A}\bar{B}) = 0.4$$

$$1. (2) \quad P(\bar{A}\bar{B}) = 0.3 \quad P(A\bar{B}) = 0.4$$

$$2. (1) C \quad (2) D \quad (3) C \quad (4) C \quad (5) B$$

3.



$$(1) \quad P(\bar{A}C) = P(C) - P(AC) = 0.1$$

$$(2) \quad P(A) \cup P(B) = P(A) + P(B) = 0.6$$

$$(3) \quad P(\bar{A}\bar{B}\bar{C}) = P(\overline{A \cup B \cup C}) = 1 - P(A \cup B \cup C)$$

$$= 1 - (P(A) + P(B) + P(C) - P(AB) - P(BC) - P(AC) + P(ABC))$$

$$= 1 - 0.7 = 0.3$$

$$5. \quad \mathbb{P} = P(A) \quad \mathbb{Z} = P(B) \quad \mathbb{J} = P(C)$$

$$P(A) = P(B) = P(C) = 0.4$$

$$P(AB) \cup P(BC) \cup P(AC) = 0.3$$

$$P(ABC) = 0.05$$

$$P(AB) + P(BC) + P(AC) = P(AB) \cup P(BC) \cup P(AC) + 2P(ABC)$$

$$= 0.4$$

$$P(\bar{A}\bar{B}\bar{C}) = P(\overline{A \cup B \cup C})$$

$$= 1 - (P(A) + P(B) + P(C) - P(AB) - P(BC) - P(AC) + P(ABC))$$

$$= 1 - (1.2 - 0.4 + 0.05)$$

$$= 0.15$$

$$7. \quad P = 1 - \frac{10 \times 8 \times 6 \times 4}{4^4} = \frac{13}{21}$$

$$8. (1) \quad p = \frac{A_3^3 \cdot C_{12}^4 \cdot C_8^4}{C_{15}^5 \cdot C_{10}^5} = \frac{25}{91}$$

$$(2) \quad p = \frac{3 \cdot C_{12}^2 \cdot C_{10}^5}{C_{15}^5 C_{10}^5} = \frac{6}{91}$$

$$9. \quad P(A \cup B \cup C) = P(A) + P(B) + P(C) - P(AB) - P(BC) - P(AC) + P(ABC)$$

$$= \frac{3}{4} - \frac{3}{8} + 1 - P(\overline{ABC})$$

$$= \frac{3}{8} + 1 - P(\overline{A} \cup \overline{B} \cup \overline{C})$$

$$= \frac{5}{16}$$